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# Town of Bedford

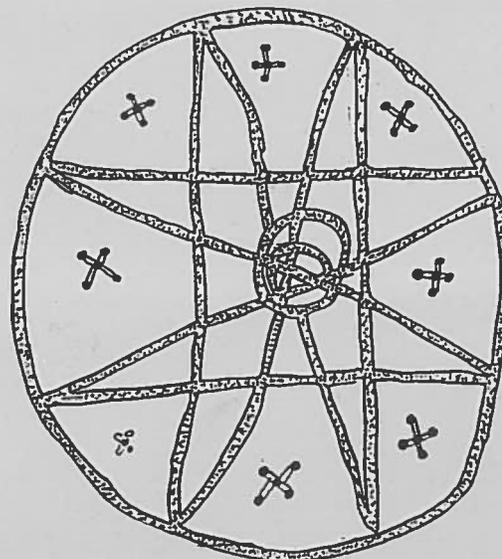
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## Report of the Bedford Petroglyph Advisory Committee

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July 1992

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# Town of Bedford

INCORPORATED 1980

August 11, 1992

Mayor Peter Kelly  
Town of Bedford  
Suite 4002  
1496 Bedford Highway  
Bedford, Nova Scotia  
B4A 1E5

Re: The Petroglyphs Advisory Committee, Final Report

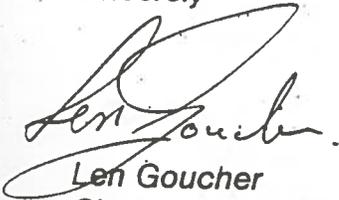
Your Worship:

*I am pleased to advise that after almost two years of deliberations The Petroglyphs Advisory Committee has completed its report on the lands known as 'The Barrens.' The attached report is the result of the commitment shown by the members of both the Committee and Technical Advisory Sub-Committee with many long hours of reflection.*

*The report contains specific recommendations with regard to the protection of the petroglyphs and final disposition of these lands. We bring this report forward with the hope that Bedford Council will take a lead role in fulfilling the recommendations contained here in.*

*Your Worship, we owe a great debt of gratitude to those who have assisted our Town in the completion of the Committee's terms of reference. This effort by The Town of Bedford is one I believe to be unique in Canada and may serve as a role model to other municipalities.*

Sincerely



Len Goucher  
Chairman, Petroglyphs Advisory Committee.

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JULY 20, 1992

## PETROGLYPH ADVISORY COMMITTEE

### FINAL REPORT

#### INTRODUCTION

Formed more than 500 million years ago, the Bedford Barrens, with their stepped 'whale backed' quartzite ridges, are a reminder of the special place to which the Mi'kmaq were drawn for centuries past. They came to camp and fish in the wooded area at the mouth of the Sackville River. The whale-backed ridges of the Barrens provided ready trails.

Over the years much of the original forest has been lost through logging and the urban development process. The 90 acre parcel remaining, the focal point of this report, is under ever increasing pressure to be opened for further development. With the "discovery" in 1983, and subsequent verification in 1990, of two Mi'kmaq stone carvings, or petroglyphs, the issues have arisen of how best to preserve the petroglyphs and how to acquire the Barrens as parkland. Some wish to have much or all of the 90 acre site preserved to provide context for the petroglyphs and to maintain the area as wooded parkland. Some landowners in the area have expressed concern that if their land is purchased as parkland they would receive less compensation than if it were purchased under its current status as developable land. Others have noted that if the Town were to make a substantial financial commitment for land acquisition and/or park development that this may affect tax rates and the development of other parkland and facilities.

Bedford Town Council has been faced with the complex issues of determining: a) should it preserve all, or a portion, of the Barrens; b) how much land is required to protect the petroglyphs; c) how much land should be acquired to provide context for interpretation of the petroglyphs; and), d) how can the property be acquired. Following acquisition of a site, Council would have to deal with providing for the interpretation and conservation of the petroglyphs, parkland development, and operation/management of the park. The issues are complex because there are scarce resources at all levels of government to solve such problems. To assist it with these tasks, Bedford Town Council created the Petroglyph Advisory Committee (PAC). This report, prepared by members of the PAC, addresses the four items above.

#### SITE DESCRIPTION

The Barrens is a parcel of land of approximately 90 acres [see attached map], bounded on the south by Division Street, on the east by Second and Union Streets, and on the west and north by the Bicentennial Highway. The Barrens are undeveloped lands, heavily wooded with some unique rock outcroppings to the west as well as a cranberry bog. Because much of the land within central Bedford has been converted from forest to urban land uses, the

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Barrens area has become unique as an undeveloped area within the central portion of Town. This is the last large tract of undeveloped land within the Residential Development Boundary, that portion of the Town which can be provided with hard services which is slated for development in the near term.

### DISCOVERY OF THE PETROGLYPHS

The petroglyphs were first reported in 1983 by Michael Ross. At that time it was decided that the best means to protect the petroglyphs would be to maintain secrecy about the existence and location of the petroglyphs. However, subsequent to this, attention focused on the Barrens area as a result of the Municipal Planning Strategy Review [MPS] process which proposed a residential comprehensive development district [RCDD] for this area in a draft plan circulated to the public in 1989. Area residents became concerned that the RCDD designation would lead to residential development of the Barrens area. Concerns were expressed that the RCDD designation could jeopardize the existing residential neighbourhood stability. Such development would eliminate this "wilderness" area. The area residents formed the Bedford Shaman Wilderness Initiative with widespread community support to preserve the Barrens as an undeveloped area.

In response to public concerns about protecting the petroglyphs the Town, in cooperation with the Nova Scotia Museum, hired Dr. Brian Molyneaux of the Royal Ontario Museum to report on the authenticity of the petroglyphs as Mi'Kmaq carvings and to examine the Barrens area for additional carvings. The field investigations took place during 1990. Two of three petroglyphs investigated were authenticated as being of Native origin, carved by stone tools. While no additional Mi'Kmaq carvings were found, in his final report Dr. Molyneaux refers to the Barrens site a 'sacred place' and a 'compelling area'. He also reported that petroglyphs are often the only surviving remnants of the visual culture of past peoples. These phrases, along with the knowledge that Bedford possessed one of the few petroglyph resources in Canada, reinforced the efforts of those who felt the petroglyphs and the Barrens area required protection.

Following the authentication of the petroglyphs, the question arose as to how to zone the Barrens to protect and maintain the integrity of the area. Area residents expressed opposition to the RCDD designation which provides for a mix of residential uses as well as a neighbourhood commercial component. Park designation of the 90 acres was considered, but was not applied by Town Council because it would have required financial compensation for all affected property owners, even those whose lands may not ultimately be acquired. Those involved in preparing the draft Municipal Planning Strategy [MPS] believed that through the Residential Comprehensive Development District [RCDD] designation and zone there would be more opportunity to control development near existing homes and in environmentally sensitive areas than would be possible with conventional R-1 development.

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There is also a wider concern about development within Bedford which no doubt has contributed to making the preservation of the Barrens an issue. This concern relates to the rapid rate of residential and commercial development within the Town during the 11 years since its incorporation. Residents have seen many changes occur in a brief period of time, and some question whether the changes were too rapid, too great, or could possibly have been of better design. A number of the previously wooded areas in Bedford have been developed for new homes, often with the loss of most of the original vegetation. Most recent subdivision designs are typical of suburban development elsewhere with no special Bedford character. These new designs are different from the older areas of Town which many think help to make the Town unique. Most residents feel that Bedford has a unique character which should be preserved through the planning process.

### ISSUES

#### Background

The issues of protecting the petroglyphs and of acquiring a wilderness park must be viewed from a number of different perspectives. There are Mi'Kmaq interests in protecting the petroglyphs and in ensuring sufficient land is provided for context. There are area residents who wish to have a "wilderness" park rather than see the Barrens developed for residential purposes. The Bedford Recreation Advisory Committee has expressed the concern that were Town Council to undertake a major expenditure to acquire the Barrens that this would further delay expenditures to develop the parkland which the Town already owns. There are also residents who have expressed opposition to the development of anything that would endanger neighbourhood stability. There are landowners who wish to sell or develop their land who prefer residential zoning to parkland open space zoning. Finally, there are the elected leaders at the municipal and provincial levels who must weigh the claims and requests of these different interest groups against those of others. These leaders must establish priorities for these and competing claims. They must decide how much land should be acquired, at what cost. Resources are insufficient to be able satisfy all requests.

From the Mi'Kmaq perspective there exists an atmosphere of distrust that affects relationships between the Native communities and governments. The political realities in the past have afforded the Mi'Kmaq few opportunities to affect the decisions which influence their lives, be it in education, health care, employment opportunities or whatever. The European settlers concepts of landownership and rights to use lands were alien to the Mi'Kmaq culture. The changes wrought in their lives by the European settlement meant the loss of many traditions and much of their independence.

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The Bedford petroglyphs must be viewed in the context of a variety of Mi'Kmaq claims. There are numerous Native issues to be resolved with Federal and Provincial governments. The petroglyphs are already protected by Provincial legislation. As Professor Davis indicated during a PAC meeting, there may be a precedent set by a decision on another sacred site. A burial site at White's Lake was protected through the parkland dedication process, an option which is also available in Bedford.

The initiative to create a wilderness park has been led by the Bedford Shaman Wilderness Initiative. Leaders of this association are concerned with more than protection of the petroglyphs and have lobbied for the entire Barrens area to be set aside as a wilderness park. To this end the terms of reference for the most recent consultant study included examination of the geological and environmental significance of the Barrens to determine if they warranted preservation and conservation. The consultant concluded that the geology and vegetation of the Barrens were not unique at a regional or provincial level. The terms of reference of the consultant's report assumed the Barrens, if acquired, would be designated as a Town Park and therefore, he felt that the area could not sustain a high level of recreational use which would be the justification for its acquisition.

The Parks Planning and Recreation Advisory Committee expressed concern that were funds used to purchase the Barrens this would further delay development of parkland which the Town already owns. The Town, with over 400 acres of parkland, has demonstrated foresight to acquire lands well in excess of current needs. The highest commonly accepted standard, which few municipalities meet, is 20 units per acre. Bedford has twice that. The Bedford Recreation Advisory Committee has recommended that 5-10 acres of land be acquired in the Barrens to provide context for the petroglyphs and for neighbourhood active recreational needs. The consultant agreed with their recommendation.

Elected leaders face innumerable claims upon limited financial resources. Town Council has decided to acquire the manor house at Fort Sackville. Park parcels, like Admiral's Cove and a variety of neighbourhood parks, have yet to be developed. The Province must consider Bedford's request to acquire the Barrens in the context of other assistance it has provided to Bedford [waterfront project with \$20-million subsidy, request for funds for manor house] and of assistance provided other communities.

#### Establishment of Petroglyph Advisory Committee

Given the diverse interests and complexity of issues, Native rights, desires to provide a substantial "wilderness park", prevention of development and the need to identify possible sources of funding, Bedford Town Council created a public committee. The municipal framework survives on the input of its public boards and it was felt that a group of

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individuals from diverse backgrounds could sensitively handle this issue. Through this process it became evident that the committee could not deal with all items in its terms of reference without significant Native input. There have been delays in making a formal recommendation to Council on the lands to be protected due to the time required to fully consult with the Mi'Kmaq. However, the PAC has remained committed to undertaking meaningful discussions with the Mi'Kmaq prior to making any recommendations on development and management of the lands acquired.

#### MPS Review

As indicated above, the petroglyphs were discovered in 1983, yet the issues related to preserving both the petroglyphs and the Barrens arose during the Municipal Planning Strategy (MPS) review in 1989. It became apparent then to area residents that there could be change in their neighbourhood. The draft MPS would permit a mixed residential development in the wooded area between their homes and the BiHi. During public information meetings to review a draft of the MPS document they expressed their opposition. About this time the Bedford Shaman Wilderness Initiative was formed. It was concerned with preservation of the petroglyphs and with prevention of development in the Barrens by acquiring the land in public ownership.

The Barrens discussion is a direct result of this process. The formation of **The Bedford Shaman Wilderness Initiative** is directly related to this desire to preserve the petroglyphs and the Barrens as a passive recreational area. From a political standpoint, this well organized group of residents effectively lobbied within the municipal and provincial political framework to draw attention to the importance of the Barrens. Through a series of well orchestrated public information meetings and involvement of Bedford Town Council, the Barrens issue grew in magnitude to be one of the five major issues in the MPS process.

During the most recent review by Town Council of the draft MPS the Barrens area was, for a time, proposed as Parkland Open Space Zone. This action would have required the Town to compensate the owners of the designated properties 10% of the assessed values of their properties annually. Within three years the Town would have to negotiate purchase or else rezone the property to permit development. This decision was subsequently reversed and the Barrens reverted to the RCDD Zone. There has also been discussion of undertaking a secondary planning strategy for the Barrens to arrive at detailed policies for this area. The detailed policies would no doubt be the result of the recommendations of this committee. However, Planning Department recommended against this procedure because a representative of the major landowner, St. Paul's Home, indicated at a public meeting they would cooperate on the sale of land required to protect the

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petroglyphs and because the RCDD process, once started, was to involve area residents and would in all likelihood require a year of negotiations during which time the PAC would make its recommendations.

The efforts to preserve the petroglyphs and save the Barrens now involves not only the municipal government but also the provincial government. The Province is concerned because it involves Mi'kmaq history and because residents seek financial assistance to acquire lands to provide context for these artifacts. Both governments can be expected to try to minimize costs by determining what is the minimum amount of land required to allow for proper protection and contextual interpretation of the petroglyphs.

#### TERMS OF REFERENCE AND MEMBERSHIP

During the July 17, 1990, meeting Town Council approved the terms of reference for The Petroglyph Advisory Committee. The primary role of this committee was:

To research and advise, and make recommendation to Town Council on the future use and/or protection of those lands located within the study area.

The committee, as approved by Council, included:

- |                                     |   |   |
|-------------------------------------|---|---|
| 2 Bedford Councillors               | - | Anne Cosgrove & Len Goucher   |
| 1 Representative from the community | - | Michael Roughneen   |
| 2 Provincial Gov't representatives  | - | Shirley Jerram; Dr. Peter Christmas (until Nov.'90); Mr Richard Hattin (Nov. 90); |
| 2 Federal Gov't. representatives    | - | Joel McNeil (Native & Indian Affairs) & Charles Lindsay (Parks Canada)            |
| 1 Recreation Advisory Com. rep      | - | Councillor Walker (Jan '91)   |

The terms of reference also mandated that PAC use the services of a 'Management Technical Advisory Subcommittee'. At the February 18, 1991 meeting of the PAC a subcommittee was formed composed of the following representatives:

- |                                   |   |                |
|-----------------------------------|---|----------------|
| Affected landowners               | - | Christine Bush |
| Bedford resident                  | - | Jack MacNab    |
| Bedford Recreation Advisory Comm. | - | Anne MacVicar  |
| Native representative             | - | Cathy Martin   |

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- |                                 |   |                      |
|---------------------------------|---|----------------------|
| Bedford Heritage Advisory Comm. | - | Jim Phillips         |
| N.S. Museum                     | - | Dr. Brian Preston    |
| N.S. Archaeological Society     | - | Jane Sproull Thomson |
| Bedford Planning Advisory Comm. | - | Bill Fenton          |
| N.S. Lands and Forests          | - | Paul Euloth          |

The scope of the PAC is to provide information, advise, and make recommendations to Town Council on such items as the physical extent and boundaries of the study area; number and significance of known petroglyphs; proposed zoning and land use designation; methods of protection for the glyphs; potential future use of the study area with consideration of cultural and economic benefits; and integration of the petroglyph site into the Town's overall parks and recreation system.

#### PROCEEDINGS OF COMMITTEE

Activities:

The Committee's activities with regard to the definition of the site can be summarised under four headings:

- a) Committee discussion and advice
- b) Advice from First Nations representatives
- c) Review of the Molyneaux Report
- d) Review of the Interpretation Resources Report

#### a) Committee discussion

The Committee's terms of reference required it "to make recommendations to Town Council on the future use of the lands located within the study area". The "study area" was defined as "those lands and the vicinity thereof where authenticated petroglyph carvings are known to exist".

The first meeting of the Committee identified three themes

- \* protection of the petroglyphs
- \* definition of the site area
- \* establishment of the use of the site

(28/08/90)

It was in relation to these themes that the Committee organized its work.

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Early in its discussions the Committee concluded that the petroglyphs and the Barrens, their context, are inseparable. It unanimously approved a motion to that effect.

The Petroglyph Advisory Committee accepts the petroglyph site and study area as those lands comprising the whole site known as the Barrens (i.e. 70-80 acres) and that the committee proceed to obtain further expert advice on the characteristics, significance, value and appropriate recreational use of the Barrens. (11/10/90)

This motion was subsequently amended to clarify "appropriate recreational use" as "low impact, and passive". It was evident that there was a desire to preserve the entire Barrens and that only low impact passive recreational uses should be considered.

In October 1990 the Petroglyph Advisory Committee invited Mr. Robert Ogilvie of the N.S. Department of Education to explain the provisions of the Special Places Protection Act. Through the provisions of this Act the petroglyphs themselves are protected. A fine would be imposed were anybody to be convicted of damaging the petroglyphs.

#### b) Advice from First Nations representatives

The Committee received advice, directly or indirectly, from Mi'Kmaq representatives at its meetings and public forums relating to the Barrens.

Dr Peter Christmas (Executive Director, Micmac Association of Cultural Studies), for a time, served as a Provincial appointee on the Committee. He advised that more important than the petroglyphs are the activities associated with them (17/09/91). He often used the metaphor of the petroglyphs as a "cornerstone", marking a sacred place. The place was not, however, analogous to a building, but rather to an area of land. The reader will note that Dr. Davis' observations which are cited later are consistent with this.

Noel Knockwood (Captain and Spiritual Leader, Grand Council of Micmacs), verbally on a number of occasions, and later in a letter to Mayor Christie, stated:

"because of the sacred drawings on the rocks, the area surrounding is sacred and holy according to the teachings of the Micmac people, the entire site should be protected as a result".

(22/04/91)

Cathy Martin (Mi'Kmaq, Member of Millbrook Band and Petroglyph Advisory Technical Committee) provides the following definition of what constitutes a sacred site according to the Mi'Kmaq tradition.

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Since it has been generally accepted by those supportive of preserving the Barrens and by some of the writers of the reports on the Barrens that the Barrens is a sacred area to the Mi'Kmaq it is important to explore the meaning of sacred. The Mi'Kmaq agree that this area is a sacred area and should be treated as such. The fact that this sacred area is being considered at all for possible development is as offensive to the Mi'Kmaq as would be the building of highrises over a cemetery or any other area considered to be sacred. In the dictionary the meaning of sacred is:

1. Dedicated, consecrated, or set apart for the worship of a deity.
2. Dedicated or devoted exclusively to a single use, purpose, or person
3. Worthy of reverence or respect
4. Of or pertaining to religious objects, rites, or practices.

The Mi'Kmaq described sacred as:

In the web of life all things are connected, balanced and dependant upon each; the other, whether they be the trees, the rivers, the sky, the four of the two-legged whose every thought, each action influences, affects and informs the direction of the future. Like the tide coming up, gradually and slowly rising, the residue forms the collective foundation along the memory of all things, the spine of our existence.

Honoring this path of collective consciousness enables the journey to continue. And so, all things must be acknowledged honored, and respected as teachers of our reality so that we might always exist. Like the brads of sweetgrass, unifying the physical, mental and spiritual through ceremony, the wholistic belief system is consecrated by ritual actualized. Interrupting the threads of that collective whole weakens our existence.

In a recent survey conducted by the Assembly of First Nations in conjunction with cultural associations across Canada, such as the Micmac Association of Cultural Studies, they interviewed several Mi'Kmaq, Maliseet, Innu and Inuit of the Atlantic Region to determine their feelings about the proposed Archaeological Heritage Protection Act. In the Act there was not a clear definition of "Sacred" so a part of the task of this exercise was to hear from the Natives what they considered to be a Sacred site and why it should be clearly defined. The following excerpts from the survey provides a sense of our cultural differences in approaching issues related to land and sites.

"The sacredness of land and our people has always been there because according to our people, according to our tradition, our heritage, all that we

.../10.../10

have is sacred. Because all comes from our creator. And that is what makes it such a unique relationship between ourselves as people and mother earth that we refer to as the land, the Territory provides us with sustenance and all that we need . . ."

(Graydon Nicholas, Provincial Court Judge, N.B.)

"There is a difference between land and property. And basically what the Anglo-Canadian system or the European system, now Canadian system, of laws does is develop property and it is all a matter of ownership. It separates all the spiritual relationships which is how I use the word Land, so when you are talking about burial sites and archaeological sites, it is really important that you have an expansive definition as opposed to exclusionary definition."  
(Patricia Monture, Mohawk, Dalhousie Law School)

#### c) The Molyneaux Report

Dr. Brian Molyneaux (Research Associate, Royal Ontario Museum) conducted "The Bedford Barrens Petroglyph Survey Project" (Appendix A). This project was funded by the Province of Nova Scotia and the Town of Bedford. The study area for this report was the whole of the Barrens. In concluding his report Molyneaux assessed the Barrens to be "a sensitive and special environment".(1990:31) Earlier in the report Molyneaux cites unpublished work done by Ruth Whitehead, Assistant Curator History, Nova Scotia Museum, in which she proposed that "the area of the Petroglyphs was most likely a site of shamanic activity".(1990:3). He notes,

in consideration of Whitehead's interpretation of the Bedford site as a sacred place, it could be suggested that the various potential motivations for aboriginal image-making may have been bound to specific social functions that did not require or invite a casual scattering of images. Following this hypothesis, the few carvings that are known to exist would suffice to mark the locality.

(1990:16)

Part of the Petroglyph Survey Project was devoted to some preliminary investigations of reports of a Mi'kmaq camp on the Barrens. Of this the archaeologist records,

It remains to be seen whether there is archaeological evidence of this potentially important occupation. In this regard it must be emphasised that the Micmac of the 19th and 20th centuries should be regarded as having the same importance

.../11

historically and archaeologically as the Micmac of pre-history. Unfortunately there has been a common prejudice that they are not".

(1990:16)

The Survey also explored another site, the Eastwood encampment. Reporting under the heading of "additional archaeological and historical resources " Molyneaux concludes that this recent archaeological context needs to be more fully examined. (1990:13,14)

Referring to the quartzite ridges (the whalebacks, the Barrens) which are the distinctive topographical feature of the area, the report states:

the ridges present what, according to Micmac religious beliefs, would have been compelling areas - striking for their unusual stone pathways above the often dense dark vegetation of the swales. In accord with Algonkian, and, indeed with worldwide aboriginal sensibilities, such places could very well have been treated within a religious context.

(1990:28)

Molyneaux reminds the reader that this was also an evocative landscape for Lismer, a renowned painter of the Canadian landscape tradition known as The Group of Seven, and suggests a connection. "The religious experience of a natural landscape to an aboriginal person may not be that distant from the emotional, aesthetic response of a person who simply seeks repose in such undeveloped places".

(1990:28)

#### d) The Interpretation Resources Report

Dr. Steve Davis, the consultant archaeologist for this subsequent study commissioned by the Town (Appendix B), at the request of the Committee, acknowledged that Molyneaux's methodology and interpretations represent a highly professional report.(1991:3) He too accepts Ms. Ruth Whitehead's conclusions. (1991:1)

Davis affirms the professional consensus is that the functions and meaning of the petroglyphs "lies within the realm of the ceremonial". (1991:3) "They are of Micmac origin and represent symbols identify (sic) a sacred place". (1991:11)

He points out that in the consultation process various groups have attempted to define the limits of a sacred place. He recommends that we must look beyond a man-made feature since this seldom applies to Native American concepts of sacredness:

Nature and natural settings are paramount within the concept of sacred place amongst Native peoples. This includes the notion of vista, that is a place that provides a feeling of oneness with nature. (1991:12)

.../12

Davis concludes that an areal limit to the "sacred place" is indefinable, whatever research is done.(1991:12) Consequently he recommends that the Province and the Town initiate a political process with the Native peoples to resolve the outstanding issues related to the Bedford Barrens (1991:14).

### CONTEMPORARY HISTORY AND CULTURAL ASSESSMENT

[The following section is taken from a transcript provided by Teresa MacPhee on March 5, 1992]

The petroglyphs are among the surviving remnants of the visual culture of the Mi'kmaq Nation. They are ours and are as important to us as our language and go right to the heart of who we are. Despite the rapid destruction of the land along the spine of the Maritimes, the industrial frontier which displaced our homeland, despite colonization and the influx of European values on Mi'kmaq communities in the name of development and economic progress, and despite the encroachment of European societies on the Mi'kmaq Nation, a history of the Maritimes, the history of the Mi'kmaq nation, refused to be conquered and remains.

Always, Mi'kmaqs are Nova Scotians/Canadians. But as a people we have a responsibility to preserve the culture of our ancestors, for our own dignity and the dignity of future generations of our people for, if this does not occur, we would no longer be Mi'kmaq and there would be no Mi'kmaq language, there would be no Mi'kmaq view of the world, and there would be no Mi'kmaq petroglyphs to add to the attractiveness of Nova Scotia.

For the Mi'kmaq people, our land is not a commodity but the heritage of our community, the dwelling place of generations. As Nova Scotians it would be unthinkable, politically incorrect, to displace or develop a sacred site that epitomizes your historical achievements; fortresses, cemeteries, churches, government buildings, landmarks of historical or cultural significance. The petroglyphs are an epitaph honouring the existence of our ancestors, this history of this great province left for all of us as a testament to revel in, no less wondrous as the unburied bones of a dinosaur, but more easily displaced.

If you are to understand who you are, you must know about the history of encounters with the Mi'kmaq people. Nova Scotia is known historically by Mi'kmaq as Mi'kmawa'kik (the land of the Mi'kmaq).

We are determined to maintain our distinct identity by rebuilding and preserving our social matrix, our language, and our cultural history, some of which is preserved in stone.

.../13

In terms of collateral, there is little to trade except our ability to survive, our resilience, our language, our culture. If we ever are to break that erosional chain on the history of our culture, or generate durable links in a new, stronger and healthier one, Nova Scotians must be willing to continue to learn from discoveries of the past and develop the present we share with each other.

The 1763 Royal Proclamation laid down a comprehensive policy, applicable throughout North America, designed to protect the Indians. This policy is applicable here in Nova Scotia and it encompasses this site.

This is called "The New World" because the "The Old World" is locked away in museums around the world. This is reflective of attitudes entrenched in colonial perspectives that the petroglyphs are artifact or curio, when in reality the petroglyphs are ART AS FACT, not a curio to be labelled, tagged and filed, but a living incision that cuts to vein of who we are.

In the wake of centuries of being defined, tagged, and filed by attitudes entrenched in colonialism, is the artist of Native ancestry standing in the backyard of Canadian society and its collective conscience, making meaning, describing identity? However attenuated, the practice of Mi'kmaq artists is an outgrowth of the tradition and spirit that laid the Barrens' original marks in stone. In the same fashion that Rembrandts or Botticellis serve as catalysts for exploring creative enlightenment for today's painters, the Barrens is no less valuable for Mi'kmaq artists. Artists are a bridge for determining our lack of creativity and of our existence. Through their visual language they speak of innovative approaches to justice and of the possibilities for harmony. Their persistence, power, and determination has established them as caretakers of culture.

The Native artist is a bridge between two seemingly disparate cultures. Through them the groundwork for exploring ways to improve the imbalanced relationship between the two now exists.

The youngest generation of these artists is positioned at this crossroad. Empowered through those who have laid this foundation, they are determined to work toward constructing and understanding that may allow for "a new humanism which will not only set the cultural heritage of First nations in motion once again but could lead the way in determining a new ideology for Canadians."

The tenacity of the stone holding the spirit of its makers script is an empowering impression that nurtures today's contemporary ethnographers, archaeologists, sociologists, historians, and educators, all of whom are vital to exploring and understanding ourselves

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in the realm of creativity. Mi'Kmaq people are determined to pronounce again their distinct and contemporary identity in a society that has seemingly been replaced save for some permanence, here, carved in stone. Again, if you are to understand who you are, you must know about who we are because we are a part of that history.

Your achievement can be observed in the emergence of ideas, ideas about the rule of law, about human rights, about the primacy of moral and ethical obligations. The application of these ideas should lead you to a fair accommodation of the importance of the preservation and protection of the Barrens. Land can be taken from a people, but its cultural significance should be respected and preserved, in location, for its relevance has been judged by the people whose history it directly represents. Violation of this judgement will only serve to compound the history of injustices set upon Aboriginal people.

In the Mi'Kmaq community one view of progress and development prevails arising out of our original occupation of the land and the persistence of our beliefs and way of life. We have managed to retain our ancestral links and however attenuated, our institutions of self-government.

The images of rock drawings (petroglyphs) on the surrounding border are borrowed from the McGowen Lake, Fairy Bay sites of Kejimikujik Park area in Nova Scotia. To date the carvings are undated and will remain so as there exists no factual scientific method to accurately date them. The only people who can tell us of their makings are, like the carvings themselves, lying quietly within the earth. That the carvings remain too, like the rocks, is unspoken evidence that a purpose and meaning exists for the maker.

Some sources speculate that the carvings are post-contact. This assumption is based on Silas Rand's introduction of the ideogram as a means for communicating with the Mi'kmaq in the 16th century. Other sources through oral history tell of wiklatmu'jk (tiny, elf-like beings) making visual re-marks into the stone surface.

Ethnologists and Mi'Kmaq sources believe that the images describe religious stories of journeys, commemorated celebrations, puberty rituals, and depicted animal spirits common to Mi'Kmaq lore.

The central image of the Barrens carving reflects a commonly used motif called the eight-pointed star. The motif has been employed and referred to by the Mi'Kmaq in ancient legends and motifs for centuries. It continues to be used today to symbolize the unity of the Wabanaki Confederacy of which the Mi'Kmaq belong along with seven other eastern groups.

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The eight arms of the star point to the four cardinal directions. Each direction, in Mi'Kmaq philosophy, is paid respect through the acknowledgement of prayer with objects, thoughts or plants from a particular geographic region. The prayer is a thanksgiving to the elements, for the elements which sustain them. Their objects, rituals, and indeed, their carvings were created in the same spirit to acknowledge their creator; a powerful mystery thus derived The Great Mystery, The Creator, and/or Nis'kam in Mi'Kmaq.

The number 4 is employed to speak of balance in both the four directions and within the person. The number is often doubled to acknowledge an understanding of two-sidedness; male/female, night/day, and that all that one sees is not necessarily all that is perceptible (The Great Mystery). This way of knowing is reflected in the eight-pointed star.

In the oral tradition, Mi'Kmaq originated, as did all people, from the centre of the earth. At this centre at the time of creation four groups of people were created; the red, the yellow, the black, the white. They were called by names other than by colour. The Mi'Kmaq were of the Butterfly clan and like all of the other groups, this one was sent to one of the four directions with a mission to carry out. Once completed, the groups were to return to the centre and then there would be total and great harmony and balance among the four people. The Mi'Kmaq, who were sent east, were like another clan from another direction unable to return to the centre. The incorporation of duplication of meanings and uses is paralleled in the eight-pointed star -- the butterfly .

In the east the colour yellow is ascribed a symbolic meaning. It is the place of the rising sun, like the new day. The east is the direction of illumination both physically and spiritually. The sun, the source of illumination, is referred to as "Grandfather" the oldest living ancestor. The life-giving source is described in the making of a circle--the life cycle. The circle surrounding the eight-pointed star is an acknowledgement of the sun who surrounds the people of the eight clans.

Long-standing oral traditions and historical fact attest to the Mi'Kmaqs' knowledge and use of star-charting as a means for land and sea travel. Thus, the sun/eight-pointed star can be further interpreted as being a compass. The lines of the star that point north align to true north and on summer solstice to magnetic north.

The sun, giver of life, is central to fertility rituals. The triangular figure to the left of the star/sun carving is a geometric ideogram for woman--giver of life. The female figure is described in a triangular fashion here, and on other rock carvings, motifs and imagery of the Mi'Kmaq to describe her life-giving energy--the tryptic. A male figure is described more figuratively and thus accurately. To duplicate a female figure in such a fashion would assume an individual had a power greater than the creator.

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Women were the primary makers of rock drawings and the absolute makers of female imagery. As the triangular figure is representing a female, its maker was a woman.

The radiating lines from the figure's head and from the vulva-shaped form indicate hair. The line that connects the forms are umbilical references and/or a penis, thus perpetuating the understanding that the Mi'kmaq engage in fertility rituals. The same female motif is employed as symbol/seal on the Concord Act of 1610.

The site itself is equally as significant to the tradition of the Mi'kmaq as the drawings themselves. In the wake of a resolution passed at the 17th Annual Assembly of the Native Council of Nova Scotia regarding the Bedford Barrens it was resolved that:

The Mi'kmaq nation in its entirety is now acting and will continue to act collectively to take all measures necessary to safeguard, preserve and protect our sacred site, known as the "Bedford Barrens", a 90 acre site, against appropriation or development, to ensure that it remains a legacy of our cultural system of values, beliefs, and traditions, in tact for the benefit of our present and future generations as a touchstone and memorial of our ancestors.

The carving serves as a sign/symbol to the people that they have arrived at the place of that which is intended to take place.

The ground upon which the carvings are inscribed is called the Bedford Barrens which rise up out of Bedford Basin like whale-backs on the sea. The area held no significant sustainable elements that would bring a people to settle permanently at this location. Small game and possibly berries would have been the only sources of sustenance. Fresh water at the edge of the whale-backs from the Sackville River would be a more probable site for settlement. Nine granite whale-backs comprise the site which are likened to natural sidewalks. The first sidewalk nearest the water holds the images in stone. It is a place of worship. It is a sacred place.

#### RECREATION

The Barrens may also be viewed in the context of regional parkland. The provincial parks policy adopted in 1988 refers to provisions for the protection and interpretation of significant natural sites and heritage resources. Map 2 depicts Metro's Evolving Near Urban Park System. A range of valuable provincial resources are depicted; areas such as Peggy's Cove, Long Lake, the Canal Lakes (Shubenacadie), MacNabs, Lawlors and Devils

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Islands, and Crystal Crescent. They are typically described as outdoor recreation parks and for natural historic sites.

A suitable designation could apply to the Barrens. It would formalize a role which its beauty attests it has already fulfilled for many generations. This action would be consistent with the Parks 1988 Policy which was designed to provide quality outdoor recreation opportunities, for present and future generations, and to conserve Nova Scotia's outstanding heritage resources in provincial parks, trails, recreational waterways and beaches. Elsewhere in PARKS: A New Policy for Nova Scotia it is stated that policy is directed toward:

....preserving unique, rare or representative elements of the natural environment and scenic landscapes. Providing readily accessible opportunities for exploration and appreciation of our natural and cultural heritage.

The Barrens site is unique in that it combines these elements in a site in the Metropolitan area, accessible to one third of Nova Scotia's population.

#### ECONOMIC IMPACT OF THE LAND ACQUISITION

There has been discussion about the merits of acquiring the Barrens as parkland versus permitting a portion of the Barrens to be developed consistent with the RCDD zoning. There have been questions about acquisition of the Barrens - how much should be acquired, at what cost, who is to pay? In addition to acquisition costs there would be development costs if the park is to serve as a Town park or regional park, rather than a neighbourhood park as it presently does. If the Town were to pay the costs to acquire additional parkland, Town Council may wish to examine the parkland needs identified in the Parks and Recreation Implementation Strategy or to update this document in light of changing needs. From a community perspective it may be desirable to acquire additional lands in the Sandy Lake area and only a portion of the Barrens. Alternatively, as has already been demonstrated by the Province's acquisition of a portion of the Barrens, the Town may pay only a limited portions of the costs for acquisition of the Barrens if other levels of government and/or non-profit groups make contributions.

If a portion of the Barrens were to be developed consistent with the RCDD Zone there would be revenue from property taxes and associated expenses to provide municipal and school services to the area. The Town does not have the means to estimate these costs. However, the Barrens cannot be examined in isolation from a land development perspective. If development did not proceed on the Barrens then it may proceed elsewhere within the Residential Development Boundary for a similar net effect on revenues and expenses.

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### LEGISLATIVE FRAMEWORK

The following federal and provincial legislation provides the legal context for making decisions about the future of the Bedford Petroglyph Site.

#### The Historic Sites & Monuments Act

This Act authorizes the Historic Sites & Monuments Board of Canada to make recommendations to the Minister of the Environment concerning the possible national significance of any historical or archaeological site in Canada. Any individual or organization may submit a site for consideration by the Board.

In practice, the Board's assessments find that most candidate sites are not of national significance. For those that are judged to be nationally significant the Board normally makes one of three recommendations - plaquing, cost-sharing or federal acquisition. By far the most common recommendation is for plaquing. This involves mounting a bronze plaque explaining the significance of the site. Plaquing provides no protection for the site, which remains in the hands of its owners. A few nationally significant sites, usually those where the owner has approached the Board with a funding request, are recommended for cost-sharing between the owner and the Canadian Parks Service. This cost-sharing program is designed primarily for the renovation or restoration of standing historic buildings and structures. Finally, and very rarely, the Board will make a recommendation to the Minister that a site of exceptional significance should be acquired and developed as a National Historic Site to be operated by the Canadian Parks Service.

Advice received by the Petroglyph Advisory Committee indicates that the Bedford Petroglyphs, while of considerable significance to local and regional Mi'kmaq history, are very unlikely to be viewed as being of national significance by the Historic Sites & Monuments Board of Canada. There is, therefore, no realistic chance that the petroglyph site would be acquired by the Federal Government to be operated as a National Historic Site. It is equally unlikely that the petroglyphs would become the subject of a cost-sharing agreement between the Town of Bedford and the Federal Government. In summary, this Act is unlikely to be of any assistance in deciding the future of the petroglyphs.

#### The Special Places Protection Act

This Act is concerned with the protection of archaeological, historical, palaeontological and ecological sites in Nova Scotia. Under the Act, the Advisory Committee on the Protection of Special Places may recommend to the Minister of Education that any site that is of archaeological interest, whether on private or public land, be designated a "protected site". The Committee may also recommend acquisition of such sites.

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Furthermore, the Act provides that no person shall destroy, deface, desecrate or alter any site of archaeological interest, whether or not it has been designated. Where development of such a site, either designated or not, is planned, a 30-day stop-work order may be issued to permit the site to be investigated. Following the investigations, the Province may permit development to continue if there are no longer any resources of archaeological interest left in situ. If, after investigations are completed, significant resources remain in situ, the province may require that the provisions of the Act prohibiting anyone from destroying or altering a site of archaeological interest be respected. This may require either redesign or abandonment of the development.

The Bedford petroglyph site, at the time of writing, has not been designated as a "protected site". By virtue of its archaeological interest, however, it falls within the provisions of the Special Places Protection Act that prohibit its destruction or alteration. The petroglyphs, including an appropriate area surrounding them, may be submitted to the Advisory Committee on the Protection of Special Places which can recommend to the Minister of Education that the site should be designated as a "protected site", and/or that the site be acquired by the Province. Presently only the petroglyphs are automatically protected under this Act, unless the site is defined.

The Act offers no guidelines for determining appropriate boundaries for the site of the Bedford petroglyphs. Clearly, the site must include the images themselves, but the Act does not indicate how large a surrounding area having spiritual association with the images might be legitimately included in the definition of the "site". Such a determination has to be made on the basis of a combination of archaeological and ethnographic evidence, of which there is very little in this regard, and the views of Mi'kmaq spiritual spokesmen.

Beyond the question of the area covered by the images and the spiritual context of the site, there is also the question of the appropriate physical boundaries that should be established to permit an effective management of the site, primarily in protecting it from vandalism. Again, the Act provides no guidance in this area. If the site were to be brought before the Advisory Committee on the Protection of Special Places, with a suggested boundary, the Committee might well approve, reject or amend the proposed boundary in its recommendation concerning the designation of the site as "protected" and in deciding whether or not to recommend provincial acquisition of the site.

In earlier correspondence between the consultants and the Nova Scotia Museum (which is responsible for the administration of this Act), the province indicated that it is not yet prepared to make a recommendation on the subject of the boundaries of the site beyond the area of the images themselves. The issue, therefore, remains one to be addressed by the PAC and its advisors prior to submitting any request for consideration by the Advisory Committee on the Protection of Special Places.

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In summary the Special Places Protection Act already protects the petroglyphs by virtue of their significance as a site of archaeological interest. The Town of Bedford could go further and submit a request for the Advisory Committee on the Protection of Special Places to consider the petroglyphs for possible acquisition by the province.

#### Establishment of a Commission

The Province has on occasion passed legislation to create commissions for the development and administration of significant historical and cultural districts. Examples include the Peggy's Cove Commission, Sherbrooke Village Commission, and Shubenacadie Canal Commission. Establishment of such a commission may be appropriate for development and administration of the Barrens site as an important provincial cultural and heritage site. Such a commission could involve representatives of the Mi'kmaq and three levels of government in the acquisition of land and the creation of development and management plans for the Barrens.

#### Provincial Planning Act

This Act authorizes the development of a Municipal Planning Strategy (MPS) which may, among other things [Section 38(2)(h)(ii)] provide statements of policy for the provision of Parkland and Public Open Space. The petroglyph site (however defined) could be identified as Public Open Space on the Generalized Future Land Use Map, and this would prevent other uses of the land. Privately owned land designated as Public Open Space under the MPS must be purchased within three years. During the three year period, the owners of such land are entitled to compensation of 10% of the assessed value of the land for each year that the designation is in effect.

An alternative approach is provided for in Section 40 of the MPA which allows for a Secondary Planning Strategy (SPS) to be developed for specific areas of the municipality that may not "... in the Council's opinion, be adequately addressed in the municipal planning strategy alone". During the preparation of an SPS there is no prohibition on development. Either the existing zoning of lands continues or other arrangements are provided to permit certain types of development. In this case the current R-1 zoning would permit single-family building development but not the construction of multiple-unit buildings.

Section 56 of the MPA permits Council to designate an area as a Comprehensive Development District. In the process of creating such Districts the Council may identify matters, such as the preservation of the petroglyphs, that must be taken into account before any agreement is reached for the development of a District. Such an agreement

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could provide for preservation of the petroglyphs within the 5% parkland dedication or, perhaps through the negotiation process, in an area greater than 5% of the total site. If the whole of the Barrens were to become an RCDD, the 5% parkland dedication would amount to approximately 4 acres.

In summary, the MPA could be used to protect the petroglyph site either through

1. designation as Public Open Space in the MPS or SPS with the Town acquiring a parcel of land sufficient to ensure the protection of the petroglyphs, or
2. through the designation of the Barrens as an RCDD with a portion of the land set aside as parkland to include the petroglyph site.

#### Provincial Parks Act

This act permits the Minister of Natural Resources to develop and operate provincial parks to provide opportunities for: a) a wide variety of outdoor recreation; b) preservation of unique elements of the natural environment; and, c) provision of opportunities for understanding and appreciation of Nova Scotia's natural and cultural heritage through interpretation, information and educational programs. The Minister is enabled to acquire land by purchase or gift, by exchanging Crown Land, and by receiving transfers from the Federal Government. The province has negotiated a land exchange to acquire 27.66 acres of the Barrens from St. Paul's Home.

The act provides for a parks trust fund for the acquisition of parkland. It also permits the department to coordinate and implement provincial parks policy in cooperation with federal and municipal governments or other persons. It may be possible that further land in the Barrens may be acquired through the provisions of this act and that Nova Scotia Natural Resources could work with a commission were one established for the Barrens area.

#### Aboriginal and Treaty Rights

Recent recognition by the Supreme Court of Canada of the continuing validity of treaties signed in the 18th century between MicMac and British authorities forms a crucial part of the argument for legal claims for Aboriginal Rights by the MicMac.

It is now generally recognized in heritage management agencies that extensive consultation with aboriginal peoples is normal practice prior to making decisions about aboriginal sites and artifacts. Such consultation is, however, a matter of mutual respect and concern rather

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than a formal legal matter. Nevertheless, the Board of Directors of the MicMac Association of Cultural Studies has endorsed a resolution from the Aboriginal Archaeological Symposium, held in Ottawa in February 1991, in which an "inherent right to ownership of Aboriginal archaeological resources" is asserted along with a claim to a "pre-eminent role in the protection, treatment and management of sacred sites". This resolution itself, of course, has no legal effect, but it does indicate the direction in which current thinking about this subject is heading.

A recent announcement indicates that aboriginal land claims to 143 areas within Nova Scotia are being prepared and will be filed this Fall. We have no indication of how the courts will respond to these claims nor whether any of them will include the Bedford Petroglyphs.

#### POSSIBLE FUNDING SOURCES

During the past year the Petroglyph Advisory Committee members have reviewed a number of methods which might be available to the Town to acquire the land to protect the petroglyphs and retain at least some of this special place in public ownership. The following is a list of possible sources reviewed by the Committee and the consultants:

##### National Historic Sites and Monuments Board

The Board conducts an evaluation to determine if the site is of national significance. If it is determined to be of national significance a determination is made of what level of commemoration is appropriate: a) erection of a plaque; b) cost-sharing to acquire site; or, c) recommendation for acquisition by the Federal Government. We have been advised that the petroglyph site is unlikely to qualify as a significant national historic site. Such designations have recently been made infrequently, given cutbacks and spending restraint.

##### The Nature Conservancy of Canada

The Nature Conservancy of Canada is a non-profit organization dedicated to preserving Canada's biological diversity through the protection of wildlife habitat, natural communities and ecosystems. The Nature Conservancy assisted in the purchase of Hemlock Ravine due to its unique vegetation. Preliminary contact has been made with an official of the Nature Conservancy prior to receipt of the consultant's report on the environmental significance of the Barrens. Given that the consultant's report does not identify unique wildlife habitat, natural communities or ecosystems, it appears that there would be little chance of obtaining funding from this source to help acquire the Barrens.

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##### Provincial Government

Civic leaders have approached the Provincial Government to assist in the cost of acquiring the Barrens as a park area. Assurances were provided that the Province would review the request and has in fact done so by negotiating to acquire 27.66 acres from St. Pauls Home.

##### Special Places Protection Act

Areas are usually designated as special places either with the consent of the owner or once the area is in public ownership. However, while there is no funding associated with the Act for acquisition of land such as the Barrens, application can be made to the Advisory Committee who may recommend that the Province, through Lands and Forests, participate in the acquisition.

##### Federal Government

Both Professor Davis and Charles Lindsay of Parks Canada have noted that it is unlikely that the Federal Government would provide funds to acquire the land deemed necessary to protect the petroglyphs. Assistance has been provided by the Canadian Conservation Institute which made moulds of the petroglyphs. These can be used in the future to create replicas for display and interpretive purposes.

##### Town Financed

During preparation of this report contact was made with the City of Halifax where 150 acre parcel of land was recently acquired for the Mainland Commons, a park and recreational area for the western portion of the City. The City itself has financed this acquisition. A similar action could be undertaken by the Town of Bedford.

##### Parkland Dedication

As part of the subdivision process the Town is entitled to a 5% land dedication of the area subdivided [less streets]. For the 90 acre Barrens area, were it all to be developed, this would result in approximately 4.0 acres of land being provided as public parkland. The Town could attempt to get most or all of the 4.0 acres to include the petroglyphs and immediate vicinity by buying the 4.0 acre site and then taking cash in lieu of parkland from those who subdivided their properties within the Barrens. This process would be complicated if subdivision were to occur for a number of smaller parcels rather than for the Barrens as a whole because some subdividers may wish to provide land elsewhere rather than contribute cash to acquire the petroglyph area.

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Other

The terms of reference for the consultant study undertaken earlier this year required the consultant to examine the area of possible funding sources to acquire the lands to protect the petroglyphs. Professor Davis reported that the two most likely sources were the Provincial Government and the Town, itself. Another possibility would be for a local non-profit organization to seek funds for land acquisition and parkland development. Early on in the work of PAC the Province indicated that it would assist in acquiring a portion of the Barrens. In late 1991 the Province did negotiate an agreement with St. Paul's Home to acquire 27.66 acres of land around the petroglyphs in exchange for other provincial property.

Many Bedford residents have expressed support for the notion of acquiring the Barrens as public parkland. It is too early to be able to discuss the possible costs to residents of acquiring additional lands and/or developing the park on the Barrens. More information is required on costs to acquire the land, on how the land is to be developed, and on who is to share these costs.

CONCLUSIONS

The activities of the Committee have resulted in its having received expert opinion from a number of different sources. From these we must reasonably conclude:

1. The Petroglyphs and the Barrens, their context, are inseparable
2. The Barrens site is a sacred place marked by the petroglyphs
3. The petroglyphs signify shamanic activity
4. The Barrens is a special place within the Town
5. There is scope for further anthropological exploration of the Barrens
6. There is scope for further research and interpretation of the Barrens
7. The Barrens present unique, rare and representative elements of the natural environment and scenic landscapes
8. The Barrens provide readily accessible opportunities for exploration, understanding and appreciation of our natural and cultural heritage. The Barrens site is unique in that it combines these elements in a site in the metropolitan area accessible to one-third of Nova Scotia's population.

### RECOMMENDATIONS

The Petroglyph Advisory Committee recommends that:

1. The Town of Bedford recognize the Barrens as a spiritual site of the Mi'kmaq Nation and such a similar recognition by the Provincial and Federal Governments.
2. Immediate physical protection be provided for the petroglyphs after consultation with the Mi'kmaq and the Canadian Conservation Institute.
3. Town Council request that the Province create a commission to oversee the protection of the Barrens and interpretation of the petroglyphs. The commission would have powers, as defined under the Provincial act for its creation, to: a) develop and manage the provincially owned land in the Barrens; b) acquire additional lands; c) ensure that the petroglyphs are physically protected from vandalism; d) develop an interpretation program for the petroglyphs; and, e) approve all development proposals and development permits for the Barrens [similar to the powers of the Peggy's Cove Commission].

Such a commission should have representation from the Town, the Native community, the Province and the Government of Canada.

4. All three levels of government contribute in due measure toward the acquisition of the entire 90 acre parcel, recognizing their different resources, to the conservation of the Barrens. Town Council will act as the lead agent and will approach the Provincial and Federal Governments for their respective contribution in the acquisition process.
5. Pending the establishment of the commission, that Town Council amend the Municipal Planning Strategy to impose restrictions on any development of the land within the boundaries of the 90 acres.

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Recommendations submitted by Teresa MacPhee:

The 17th Annual Assembly of the Native Council of Nova Scotia passed the following resolution:

The Mi'Kmaq Nation in its entirety is now acting and will continue to act collectively to take all measures necessary to safeguard, preserve, and protect our sacred site known as the "Bedford Barrens", a 90 acre site, against appropriation or development, to ensure that it remains a legacy of our cultural system of values, beliefs, and traditions, in tact for the benefit of our present and future generations as a touchstone and memorial of our ancestors.

In light of this resolution regarding the area known as the "Bedford Barrens" the Mi'Kmaq Nation puts for the following proposal to the Petroglyph Advisory Committee, the Town of Bedford, and the Province of Nova Scotia:

IMMEDIATE SHORT TERM ACTION PLAN

- Establish a Mi'Kmaq Petroglyph Commission with municipal (PAC and Town of Bedford representative), Provincial, Federal, and Mi'Kmaq representatives who work with the Mi'Kmaq Nation under the direction of the Grand Council to determine appropriate preservation methods, and to allocate funds necessary to carry out such recommendations.
- Adopt and install the following structural proposal (Appendix C) for protecting the petroglyphs.

LONG TERM ACTION PLAN

- Such a Commission would be set up to determine long term goals and utility of the site, develop protection policies, and be the instrument by which the preservation and protection of other scared sites located within the Maritimes are approached, preserved, and protected.
- A Commission process would, under legislative authority as a body, administer measures whereby long term planning and actions will ensure, to the benefit of both communities, the protection and preservation of the site which is of great cultural, historical, recreational, environmental, education, and most importantly, spiritual value that, to date, is unheralded. The Commission process would invariably lead to discussions that pave the way for considering this site as a gateway for cultural understanding. This historical and spiritual landmark of the Mi'Kmaq people enriches our province and makes it all the more unique and attractive and should be seriously considered by the Government of Nova Scotia in its mandate for restoring, preserving and recapturing the Province's historical aspects.
- Set tangible recedents for determining and actualizing methods of preservation and protection for thirteen other significant sites within the region.
- Provide opportunities to experts within both communities to share resources bases of knowledge that would lead to the development of sound working relationships for future endeavours. Beyond revitalizing existing dialogues with all parties concerned a Commission would initiate and further develop a communicative link.

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# Proposed Petroglyph Reserve



Town of Bedford  
Planning and Development Control Department

July 1992

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5. Interview with George Christie, Bedford resident, age 84, by Hattin and Philips, 23 July 1991.
6. Interview with Gordon Hargreaves 13 July 1991, present owner of 18 Dartmouth Road, by Hattin.
7. Interview with Lewis Nicholls, 15 July 1991, Bedford resident since 1932, age 87, owner of 20 Dartmouth Highway, by Hattin.
8. Interview with Maynard Beamish, 16 July 1991, Bedford resident since 1939, age 77, owner of 22 Dartmouth Highway, by Hattin.

APPENDICES

APPENDIX A - MOLYNEAUX REPORT

APPENDIX B - INTERPRETATION RESOURCES REPORT

APPENDIX C - PROPOSED PROTECTIVE STRUCTURE FOR PETROGLYPHS

APPENDIX D - HISTORY

The Bedford Barrens Petroglyph Survey Project

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Toronto, Ontario

Heritage Research Permit No. A1990NS18  
Submitted August 20, 1990



Bedford Petroglyph Site — BeCw-2

## 1. Introduction

The Bedford Petroglyphs Project was developed by the Nova Scotia Museum and the Town of Bedford as an archaeological survey of a section of the Bedford Barrens slated for future development.

The Barrens is distinguished by a series of roughly parallel quartzite ridges (of the Goldenville formation) that follow the contours of the high ground overlooking the head of the Bedford Basin. The dry ridges alternate with low lying areas of soil. These swales provide a damp and sheltered environment for a diversity of plant and animal life.

The study area consisted of two parcels of land: Area 1 is approximately 70 acres of private, largely undeveloped land; the ridges in this area total about 2 kilometres in length. In addition, a small partially developed park owned by the Town (Area 2) was also to be surveyed.

The reason for the archaeological survey is the presence of several petroglyphs on one of the quartzite ridges (site BeCw-2). Preliminary evaluation by specialists (Whitehead n.d.) suggested that these carvings were made by Micmac people or their prehistoric antecedents. As these resources were potentially significant aspects of Nova Scotia's past, they needed to be brought within the planning process of the Town of Bedford so that a proper management strategy could be formulated.

The specific goals of the project were: a) to examine the rock ridges for further petroglyphs, to map and record them; and b) to discuss the general age of the petroglyph resources and provide some interpretation of their historical and archaeological significance.

It was anticipated that more petroglyphs would be found, as several possible examples had been located by Ruth Whitehead

and others were reported by local residents (Tony Edwards, personal communication) and by some Micmac visitors to the site (Kathy Martin and Shirley Bear).

Although any human marking on the rocks could be defined as a petroglyph, recent (ie. 20th century) names, initials and dates are regarded as graffiti and were not to be recorded - unless they contributed to an understanding of a site.

## 2. History of the Site and its Interpretation

The existence of the Bedford petroglyphs was first reported by a local resident, Michael Ross, in 1983. The carvings are located less than 50 metres from the side of the as yet undeveloped extension of Division Street, near where it joins the end of Emmerson Street. Immediately below the petroglyph area (within 10 metres), running approximately parallel to the ridge, are two developed properties (house and landscaped grounds).

In spite of the proximity of the carvings to a neighbourhood that has been largely in place since early in the 20th century and whose residents use the Barrens ridges for casual subsistence and recreation, other residents of the immediate area appear to have had no knowledge of the markings.

During 1983, the site was briefly examined by the writer along with Ruth Whitehead, Assistant Curator in History, Nova Scotia Museum. Our initial consensus, that two of the petroglyphs were of aboriginal origin and possibly prehistoric, was based on the superficial appearance of the glyphs: an eight-pointed star contained within a circle and a composite figure of an anthropomorph (human-like form) and a vulva. These images were similar to forms represented in Micmac material culture; compared to the sharpness of metal-cut initials nearby, they were uneven in depth and line, suggesting that they were pounded and abraded by a stone or

other blunt tool; and they appeared to be quite old, because of the extensive growth of crustose lichen and the weathered appearance of the margins between the carved and uncarved stone.

This initial impression of the petroglyphs was developed by Ruth Whitehead in an unpublished, but circulated, draft report (Whitehead n.d.). She showed examples of forms similar to two of the petroglyphs in Micmac art and ideographic writing and, with this convincing analogical evidence, used the iconography of the ethnographic symbols as a means of interpreting the petroglyphs and the function of the site. As celestial forms were linked in Micmac iconography to religious belief, she suggested that the area of the petroglyphs was most likely a site of shamanic activity (Whitehead n.d.:6).

During the first week of the present project, it was discovered that an alternative opinion as to the age and origin of the petroglyphs had also been voiced: that some, or all, of the petroglyphs were the work of non-aboriginal people.

This competing interpretation is reflected in the records of the petroglyphs held by Bedford Heritage '80. Photographs of the petroglyphs (made by a former Chairman of the group) are labelled as the work of the Micmac "and/or" two specific groups of local residents.

Also in the early part of the project, a Maliseet spiritualist, Shirley Bear, publicly claimed on the basis of religious inspiration that the petroglyphs are pre-Columbian and that the circle petroglyph represents a sweat lodge, marking a place where sacred fasting took place (Bear n.d.).

In view of the contrary views of the age and origin of the petroglyphs, and their apparent social and political dimensions, the proposed interpretive aspect of the survey

took on an increased significance.

As a result, the working strategy was divided into two foci: the archaeological survey of the rocks; and historical research into existing knowledge resources within the town concerning the petroglyphs and their Barrens locality. Of specific concern in the latter aspect was whether there was any direct knowledge of the creation or use of the known petroglyphs, or others, among local inhabitants.

In addition, this research would attempt to gain an impression of the Barrens as a focus of cultural activity, in order to provide a wider context for the interpretation of the meaning and function of the petroglyphs.

### 3. Working Strategy

#### 3.1 The Barrens survey

The initial stage of the survey was a search of all the ridges in the study areas 1 and 2, intended to identify petroglyph localities for further intensive recording and analysis.

The ridges were located by the study of aerial photographs (taken in 1981), amended by the Town of Bedford property maps (Province of Nova Scotia, Property Mapping Series, Bedford, Sheets 5N10-51SE; 5N10-61SW; 5N10-60NW; 5N10-50NE).

An additional locality, the area of the Barrens across the Bicentennial Highway, was also suggested as an area to be investigated if time permitted (B. Zwicker and D. Davis-Lohnes, personal communication).

When new petroglyph areas were located, the sites were to be tied in to the key maps for the study areas, the Bedford property maps, individual site maps of the petroglyph

localities would be prepared, and the site recording would be done.

As petroglyph survey can only be carried out in dry weather, it was intended to use rainy days for research into the cultural context of the Barrens area, its significance and use within the Bedford settlement. An understanding of this would be applied to the interpretation of the age, meaning and function of the petroglyphs.

### 3.2 Survey procedure

#### Site enhancement techniques

In order to find petroglyphs on a rock surface, it is most often necessary to use visual enhancement techniques. Weathering tends to reduce the contrast between carved and natural surface, so that an image may be invisible to the naked eye under normal lighting conditions. The fact that the known petroglyphs in the Barrens are relatively deeply carved and located on a well-used pathway immediately adjacent to houses and streets, and yet were not reported until 1983, indicates the potential difficulty with seeing any other petroglyphs on the ridges.

Daylight enhancement of the petroglyphs was accomplished by the use of finely ground white refined flour. Flour is regarded as a benign substance that may be quickly removed from the site and is entirely non-abrasive. When flour is dusted on the rock surface, it tends to collect in the breaks in the surface, creating a contrast with the surrounding rock that substantially increases its visibility.

The primary form of enhancement, however, was the use of raking light during conditions of subdued light, at dusk and in the dark. When a flashlight is directed at a low angle across a rock surface, any indentations remain in shadow. By

controlling the size of the light source, it is possible to use this technique for detailed direct tracing or the scanning of large rock surfaces during the initial survey.

The ridges were examined in daylight and, where practicable, at night. Night work was intended as a more intensive means of examining the rocks where petroglyphs were located during the day.

#### Site recording techniques

Petroglyph recording should be done with a minimal amount of direct contact with the rock surface. This care is taken to ensure that no damage is done to the petroglyph, either through the abrasion of the surface (as may be caused by chalking in the image or by some forms of rubbing) or contamination with chemical substances (used in the visual enhancement of the images for recording, or for the recording itself).

In areas where petroglyphs are protected and conditions may be controlled, it is possible to use indirect methods, such as photography, to provide an acceptable record; where the carvings are subject to weathering or defacement, however, it is necessary to use various forms of direct recording to ensure that as precise a record as possible is made. This need is especially clear in environments such as the Bedford Barrens, where the petroglyphs are threatened with defacement or destruction due to urban development.

For the Bedford project, site recording was done by using both graphic and photographic methods. The petroglyphs were traced by placing Mylar (a dimensionally stable transparent tracing film) over the rock surface and outlining the worked areas with technical pens and india ink. In order to maximize the visibility of the petroglyph, this work was done in subdued light, at dusk or in the dark, using the raking light

method of enhancement.

The petroglyphs were also recorded by means of 35mm colour photographs (see photos).

Because of the specific artistic expertise of the project assistant, Teresa McPhee, other benign methods of direct recording were also considered. McPhee tested rubbings, made with chalk on rice paper, but the results were unsatisfactory. It was ultimately decided to attempt to make paper casts of the images.

Paper casting is a technique that was sometimes used in the 19th and early 20th centuries for recording petroglyphs. It was first replaced by plaster and later, by latex casting materials, which provide a superior replication of the rock surface. With the prevailing concerns with recording damage to petroglyphs, however, paper casting provides a singular advantage: it consists entirely of an acid-free paper fibre pulp in water, with no chemical binder. In effect, it is a paper made on the surface of the rock. In contrast, the most accurate moulding material, latex, has oils that may stain and otherwise contaminate the rock and its adhesion to the surface is such that releasing the mould will often lift loose particles of rock as well.

When the cast has dried, the top surface is painted with Artist's Gel; this creates a flexible skin that allows the mould to be lifted away from the rock without it being damaged.

In addition to the use of paper casts, small areas of petroglyphs were moulded with artist's clay (natural); this was done by pressing small pieces against the surface and lifting them to retrieve an impression. This technique was utilised in the circle petroglyph where it was cut by a set of initials, in order to determine the sequence of carving.

#### 4. Project Results

##### 4.1 Field survey coverage

The upper surfaces of all the exposed ridges in the two study areas were examined for petroglyphs, as were isolated outcrops of rock detectable from the analysis of the aerial photographs and discovered in the course of walking through the swales between the ridges.

In addition to these surfaces, it was discovered early in the survey that many of the ridges also had exposed vertical surfaces. These walls are an aspect of the general morphology of the ridges, which may be described in profile as roughly similar to waves, with a sloping front, a rounded crest, and a vertical back. The walls form the back of the ridges, facing up the slope of the hill.

Although this specific attribute of the rocks was not anticipated, and, certainly, not accounted for in the project development, it was possible to examine many of the areas not heavily overgrown with bushes and trees from the swales, most particularly the rocks in proximity to the known petroglyph site.

It must be stressed, however, that, in consideration of petroglyph sites in the rest of the world, such generally inaccessible vertical surfaces are the least likely areas to have been utilised for petroglyphs - not the least for reasons of practical difficulty in carving in such areas, the lack of visibility of the finished product, and, specifically to the Micmac, any cultural reason for hiding images away.

It may be concluded, therefore, that the survey has achieved the standard of completeness as set out in the research design.

##### 4.2 Field survey results

###### Area 1

The result of the survey of the Barrens ridges of Area 1 was, firstly, that no petroglyph areas beyond the known location were identified and, secondly, that no additional petroglyphs were found on the latter site.

Several clusters of names, initials, and dates were discovered further along the petroglyph ridge and a small number of isolated initials are scattered on other ridges near the housing developments, but no other representations were found.

One carving of a name, date and location was discovered on a small outcrop of a ridge, mostly buried, further down the slope from the petroglyph ridge towards the Basin. This carving is of potential interest because the family name 'McDonald' and the place 'Shubenacadie' suggest the possibility the individual was Micmac (see below).

###### Area 2

The area owned by the Town of Bedford and designated as a park was also examined. A section of intact ridge survives in this area, but it has been defaced by painted graffiti. No evidence of petroglyphs was found.

##### 4.3 Interpretation of results

The absence of petroglyphs from the Barrens ridges is partially due to the lack of suitably smooth rock surfaces. This condition is largely the effect of rock weathering. Quartzite is a sedimentary or metamorphic rock consisting

almost entirely of silica. The rock retains the character of its depositional sequence by tending to split along the bedding plane. As the bedding plane of the Barrens rocks is in an almost vertical position, it presents weak points for weathering both in the cracks between beds and the crossing of joints and other fractures. The result is that, although the rock is seemingly hard, exfoliation and granular weathering is extensive on the exposed surfaces. The resulting hollows and crevices provide an anchor for soil and vegetation, further enhancing the breakdown of the rock.

The extent of this process may be seen by the fact that initials done as recently as 1975, and cut with metal tools, are sufficiently weathered to be difficult to see in ordinary light (see photos); and initials from the 1920's show even more pronounced signs of weathering, including the rounding of carving edges.

Because of the extensive weathering, the majority of the rock surfaces in study area 1 are rough and not conducive either to the creation of petroglyphs or, if the ancient surface was suitable, to their preservation. In most instances, only a narrow band on the top of the ridges had any potential for carving.

A second reason for the absence of petroglyphs from the Barrens is simply that petroglyph carving is a relatively uncommon phenomenon, even among peoples who are known to practise the art.

At Kejimikujik Lake, for example, Molyneaux (1981) identified 499 petroglyphs as being reasonably assigned to the Micmac. Considering that these extensive slate beds are situated in what was an important aboriginal resource area, with evidence near the outcrops of a large occupation site, this is a relatively small number of images.

In consideration of Whitehead's (n.d.) interpretation of the

Bedford site as a sacred place, it could be suggested that the various potential motivations for aboriginal image-making may have been bound to specific social functions that did not require, or invite, a casual scattering of images. Following this hypothesis, the few carvings that are known to exist would suffice to mark the locality.

#### 4.4 On the reports of additional petroglyphs

A number of reports of potential new petroglyphs were investigated during the survey. These proved to be features associated with the weathering of the quartzite.

Because of the vertical nature of the beds, a common feature of the rock surfaces is the existence of what may appear to be grooves similar in character to the cuts or gouges of petroglyphs. Such features may be caused by the weathering of bedding cracks and joints, glacial striations and, possibly, more recent ice rafting, the result of loose, angular rocks being moved across the rock face through downslope movement, especially as ice or frozen snow shifts in the spring.

This condition appears to be the basis for at least some of the reported petroglyphs from other locations on the Barrens.

This form of weathering appears to be responsible for the possible 'angel' petroglyph reported by Ruth Whitehead. The very indistinct form may be seen under certain lighting conditions on a slope along the ridge between the known petroglyphs and a cranberry bog. Examinations of this area under raking light and during daylight suggested that it was most likely natural. The arching lines that define the arms of the figure appear to be caused by the way that the vertical bedding has been exposed by the action of glaciation and subsequent weathering.

On a visit to the site at the end of July, Kathy Martin

directing a National Film board segment at the site) pointed out some suggestive forms along the petroglyph ridge trail that were also consistent with this specific form of rock weathering.

With such physical conditions, it may be expected that there will be further reports of petroglyphs or other markings that share these characteristic weathering features. Most particularly, some of the vertical walls have areas covered with striations, some of them crossing to form patterns that could be interpreted as of human origin.

It must be noted, further, that claims of validity could potentially be made for features that are entirely natural. The interpretation of natural forms as having cultural significance, such as supernatural origin, is a common characteristic of many aboriginal religions.

An additional form of weathering is responsible for reports from several informants of a rock near an old trail to Jack's Lake that was variously described as containing various kinds of marks, including animal tracks, pear-shaped hollows and circles.

This site was located on the last day of fieldwork on a high ridge now cut off from the rest of the Barrens by the Bicentennial Highway. As described, the top of the ridge has numerous pits and hollows that are highly suggestive of tracks and other forms. These marks are, however, natural, the product of the weathering of inclusions of softer minerals in the quartzite.

The remains of a ridge in front of an apartment block on the bend at the top of Rutledge Street was identified as a further potential location of petroglyphs. The site was examined by this writer and Ruth Whitehead; the rock appears to have several deeply carved initials, but no representational forms were found. As this rock is outside

the study area and, indeed, in land already developed, it was not given priority and could not be examined further.

#### 4.5 Additional archaeological and historical resources

##### The Eastwood camp and cranberry bog

The petroglyph ridge ends in a very large section of exposed rock that slopes steeply down to two areas of cranberry bog. One bog is dominated by a large stone in the middle, creating a striking panorama.

At first sight, these bogs appear to be wholly natural, as such vegetation is characteristic of the region when the conditions are right. On examination, however, it was discovered that the bogs were enclosed by low dikes: walls of loose rock packed with soil. In addition, a rough drystone wall was found to run along the bottom edge of the exposed rock surface, where it meets the vegetation. This wall runs to a small stream bed. Around the stream, there is evidence of more extensive drystone construction. And in the woods next to the bogs, the remains of several small buildings were discovered, with drystone foundations, and, possibly, a filled-in well and a root cellar.

These various features turned out to be the home and workings of Oswald Eastwood (1871-1948). One informant suggested that he had established the cranberry bog sometime in the 1920's. Eastwood moved there permanently c. 1935 from his family home (now demolished), which was located a short distance down the hill at the end of Cunningham Drive (George A. Christie, personal communication). He lived at the edge of the Barrens until his death.

It is likely that Eastwood enhanced the development of an already existing bog through his construction of dikes to catch the spring runoff and create pond conditions. Several

informants said that Eastwood's intention was to raise the cranberries.

As an actual resident of the ridge where the petroglyphs are located, Eastwood had to be considered as a potential petroglyph carver. Two facts, however, mitigate against this. The massive slope above his house is untouched, except for a scattering of initials. And, if he had carved on the rocks, it would have undoubtedly been done with considerable care. On the drystone wall that formed one side of the Eastwood property line in the town is a large slab of rock, on which Oswald Eastwood chiselled his name and date of birth in sharp, well-executed letters.

Although he is given short shrift in Tolsen's (1979) history, several informants regarded him as an intellectual and inventive man, and a significant and colourful asset to Bedford's past. This recent archaeological context, therefore, needs to be more fully examined.

#### A Micmac camp

Following Elsie Tolsen's brief reference to Oswald Eastwood (1979:259), she has a further reference to the Barrens that is of particular significance to the present survey, for she says that Micmac people lived there as well:

Up in back of Eastwood's was the 'tram-line', a narrow-gauge railway with wooden rails on which logs were transported to the mills. There were Indians up there, also, and Sinclair Myers remembers Joe Morris, the Indian who made arrows for the boys.

According to Mrs. Mary Joudry, the tram-way ended just above her house (ie. near what is now the section of Cunningham Drive that runs up the hill). Although it has not been possible in this survey to attempt to trace the route, it

would have been near both the original Eastwood home and Oswald Eastwood's place in the Barrens.

In another interview, George Christie recalled his parents talking about a Micmac camp in the area; he thinks that it was situated on a level area off the right-hand end of Cunningham Drive. It was said that the camp was used around the turn of the century. He also recalled one local resident who used to tease a Micmac named 'Little Joe Morris'.

This information indicates that the area between the first Barrens ridge (the petroglyph ridge) and the settlement may have been an area where the Micmac camped - especially after they were prevented from camping in their traditional areas at the mouth of the Sackville River.

In order to investigate the Micmac presence in this area further, the writer began to search for someone with further knowledge of the Micmac man mentioned in Tolsen's (1979) book and by George Christie.

Louis Morris, Instructor at the Micmac Native Learning Centre in Halifax, introduced me to a relative, Ms. Patricia Morris, whose father had that name. She stated that her father was sometimes called 'Little Joe Morris', as he was only 5'5" tall.

Joe Morris' family came from Beaverbank, and over the years stayed in many places in the area: Hammond Plains, Beaverbank, Three Mile Plains, Enfield. Ms. Morris has no specific memory of her father ever speaking about living in Bedford, however.

It is not at all clear, therefore, whether this is the same man as the one in the Bedford Barrens camp, although Ms. Morris' father (1894-1950) would have been of the right age to have impressed himself on the memories of some Bedford townspeople prior to the First World War.

Near the end of the survey, an attempt was made by the writer, in the company of Tony Edwards, Chairman of Bedford Heritage '90, to locate the 'level ground' where a Micmac camp might have been located. During this search, a small patch of exposed rock on the buried ridge immediately below Oswald Eastwood's place was found to have the following, highly weathered inscription: "N.T. McDonald, June 21, 1908, Shubenacadie".

In the census of Enfield R.C. Parish for 1897, the Indian Reserve at Shubenacadie listed a Louis Noel McDonald (b. 1844) and a son, Thomas (b. June 21, 1887). Although it may be coincidental (Thomas was listed as his first name), this Thomas McDonald's 21st birthday would have been June 21, 1908 - the same date as the carving on the rock!

Although much more research needs to be done on this aspect of the history and archaeology of the Barrens, one important fact is clear: there was a Micmac presence on the Barrens in the area of the petroglyph ridge into the first part of the 20th century. One name, Joe Morris, is connected to this almost totally neglected aspect of Bedford's history and, possibly, another, the 'N.T. McDonald' of Shubenacadie.

It remains to be seen whether there is archaeological evidence of this potentially important occupation. In this regard, it must be emphasised that the Micmac of the 19th and 20th centuries should be regarded as having at least the same importance historically and archaeologically as the Micmac of prehistory. Unfortunately, there has been a common prejudice that they are not.

## 5. Analysis of Petroglyph Resources: Site BeCw-2

In accord with the aims of the project, the existing petroglyphs were recorded in the selected media: direct tracings, paper casts, and photographs. Then, each was examined for the purposes of retrieving any empirical information that might lead to an understanding of its age or significance.

### 5.1 BeCw-2.1 - 'eight-pointed star'

Petroglyph BeCw-2.1 (see photo) consists of an outer circle, filled with an eight-pointed design, reminiscent of a double star or sun, and a small inner circle, enclosing the intersection of the arms of the star design. In the interstices of the star, small 'x' type crosses have been carved.

Superimposed on this design (see below) is a set of initials, 'A.I.' and a set of initials 'H.I.' or 'I.H.'. In addition, there is a small form shaped like a Christian cross along one edge - although this latter form may be natural or accidental.

The sequence of initial and petroglyph was determined in an examination of the 'A' initial, using a clay impression. This mould revealed that the horizontal bar of the letter was cut into the petroglyph, indicating that the petroglyph groove existed prior to the carving of the initials.

Close-growing crustose lichens have colonised a large portion of the petroglyph. The sections nearest the vegetation (see photo), however, are relatively free of biological growth. This suggests that the petroglyph may have been partially covered by growth in the recent past.

This petroglyph has also been subject to defacement. Lichen

has been scraped out of a number of the grooves in order to enhance the visibility of the image - likely for photographic purposes. Some informants attributed this damage to local people or to the media; it is most probable that the image has been subjected to various episodes of such damage since its rediscovery in 1983.

The turf running along the lower edge of this petroglyph was lifted in order to determine if any more images were present. No more petroglyphs were found, but a second pair of the initials 'A.I.' were discovered, situated to the right of the first and beneath a huckleberry bush.

#### Manufacturing technique

A section of the undamaged part of the petroglyph groove was examined using a clay impression. This revealed that the groove is relatively broad and shallow.

These features suggest that the tool did not have a symmetrical shape, such as a round point, but was likely more flat and narrow, so that it could be used to scrape or gouge - in the manner of an adze or chisel. Variation in line width, especially in the inner design, may be the result of using the tool at an angle.

Such a technique is suggested by a section of the outer circle that is uniformly straight for several centimetres, as if it were produced with a back-and-forth scraping motion.

On the other hand, some of the grooves have an uneven line, possibly indicating that the rock was pounded first, before chiselling or abrading.

The 'crosses' appears to have been produced either by pounding or gouging. They are highly variable in width and depth, with one scarcely detectable at all.

#### 5.2 BeCw-2.2 'anthropomorph and vulva'

This petroglyph (see photo) appears to be a composite, consisting of a vaguely anthropomorphic figure, with triangular body and circular head. Hair-like projections or rays protrude from the head. The enclosed space of the triangle is marked with several lines of the same type as the outline; it is not clear what they are intended to represent. A number of small holes in a symmetrical pattern are situated near the lower left-hand corner of the anthropomorph and several others have been made to the left of the head. The enclosed area of the head has several larger, uneven pits.

This figure is connected by a single line to a shape that is commonly found and interpreted elsewhere as a vulva.

#### Manufacturing technique

The petroglyph has variation in line width and also in depth, with some areas interrupted by unbroken rock. The symmetrical pattern of holes appears to have been ground or drilled, and the pits in the head were likely made by being struck with a blunt tool.

The tool used appears to have been narrow and possibly wedge-shaped, enabling it to be used in the manner of a scraper or chisel. Either the same tool, used on edge, or a narrower tool has also been used for some of the lines, and an end may be used to grind or drill the small holes.

#### 5.3 Comparison of the two petroglyphs

Although this second petroglyph is not as consistently carved as the first, it has some parts with exactly the same line width and depth. This evidence suggests that it was made by

the same tool or tools.

What either petroglyph lacks - in this superficial, non-microscopic examination - is evidence of sharp corners, lines or edges that would indicate the use of a metal tool. It must be observed, however, that weathering action seems to have rounded off the edges, making it difficult to tell.

In order to investigate the manufacturing technique further, it would be necessary to submit the petroglyphs to a microscopic examination and to simulate the manufacture on similar pieces of quartzite with different kinds of tools.

#### 5.4 Site BeCw-2 'stick figure'

This petroglyph (see photo) was recorded by Whitehead (n.d.) as a figure throwing a spear. As it was clearly fashioned with a metal tool, because of its v-shaped groove and sharp edges, it was not directly associated with the other two petroglyphs, but was, nonetheless incorporated into the site as of potential Micmac origin.

At the time of its discovery, Molyneaux and Whitehead regarded it as problematic, however, because it resembled nothing in the known repertoire of Micmac art and the subject matter was typical of what is commonly found in representational graffiti that attempts to imitate 'Indian' carvings (recent examples exist in Kejimikujik National Park).

When this petroglyph was examined during the present survey, it was noted that the rock above the figure had exfoliated in a canoe-like pattern. This transformed the glyph into a figure with an upright canoe above it. As numerous examples of the incorporation of suggestive natural features into rock art may be found throughout the world, with a number of examples among the Algonkians of the Canadian Shield, it did enhance the possibility that the image was genuine.

During the second week of the survey, however, in the course of interviews with local residents, Mr. David Pasley, who owns the property immediately below the rock, indicated that his son, Mark, (b. 1965) might have been responsible for some, or all, of the carvings. According to Mr. Pasley, Mark spent much time playing on the rocks during the 1970's, had carved his name and initials in various places and was said to have carved other pictures as well.

Mark Pasley was available to be interviewed near the end of the survey (July 30) as he coincidentally arrived to visit his father from his home in Ontario. He remembered carving a stick figure, along with his name and date on the rock; he then walked up to the site and directly to the recorded carving and identified it as the one he had made. He stated that he made the figure as it was originally recorded, as a stick figure throwing a spear, in June or July of 1975, using a cold chisel and an old wood chisel. He says it was probably the same day as he carved 'Mark 1975' on the same rock above and to the left of the figure (see photo).

On the other hand, he says that he had never seen the other two petroglyphs.

Because of this evidence, the 'stick figure' is now removed from further consideration.

## 6. Assessment and Interpretation of the Petroglyphs

### 6.1 Evidence for cultural attribution

It is not possible to determine absolutely the specific origin, or the original meaning and function, of the petroglyphs. All interpretation is made by analogy to other information. Although interpretation is relativistic, however, it may be controlled by requiring some form of

direct relation with other aspects of material culture or with associated evidence at a site.

The association of the two petroglyphs to the Micmac has been convincingly demonstrated by Whitehead (n.d.) in her presentation of analogous forms in ethnographic art. This association is especially clear for the 'star'.

Shirley Bear (Bear n.d.) most recently interpreted this petroglyph as the image of a sweat lodge. She based this judgement in part on the existence of a 'definite' doorway that opens to the east. The only break in the circle, however, is provided by the letter 'A' in the initials 'A.I.'. As the crossbar in the A is obscured by the petroglyph groove, it might be misinterpreted as a doorway.

During the course of this project, a number of alternative, non-Micmac sources for such a 'star' design were also considered, including Masonic and related symbolism, but no similarities were found.

An additional highly indistinct set of initials, 'G.C.', was discovered during night recording adjacent to the circle. These initials appear to have been pounded out with a blunt tool - perhaps a rock or hammer. The slight resemblance in the form of the lines to the 'star', brings up the possibility that the two are related. The difference in technique, especially the fact that the initials appear to have been made in a perfunctory fashion, as opposed to the labour that went into the star, suggest, however, that this association is most unlikely.

## 6.2 Age Determination

There is no physical means by which to determine the absolute age of the Bedford petroglyphs. Claims of knowledge of antiquity through religious inspiration rely completely on

faith and are, therefore, both ideosyncratic and untestable. It may be possible, however, to provide a 'terminus ante quem' (the time before which the action must have occurred) for a petroglyph. This may be done in two ways: first, if there are datable features in association; and second, if there is a record or eyewitness account of its existence at some time in the past.

Because of an opinion in the town that local residents may have made the petroglyphs - born out, as discussed above, in regard to the 'stick figure' - the determination of a 'terminus ante quem' for the putative Micmac images gains additional importance.

The evidence of the initials

The fact that two sets of initials cut the 'star' petroglyph provide an opportunity for the setting of a 'latest' date.

It is reasonable to suggest that a two-letter set of initials provides too little information to link it to a specific individual. The fact that the 'family name' of 'A.I.', which cuts through the petroglyph, begins with the letter 'I', however, provides at least a possibility that it may be more confidently linked to a specific individual - 'I' names being rare in the local area.

With the present-day accessibility of the site and the large population expansion in the Barrens area in the last two decades, such an exercise seems unlikely to succeed. There is evidence, however, that these initials may be relatively old.

Firstly, the second set of initials were situated beneath the matted roots and soil at the edge of the exposed rock. They were exposed when the vegetative cover was lifted and pulled back. Immediately above the initials was one branch of a

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it would seem unusual to have adopted such a  
ve - unless the growth was absent at the time

growth may not be used as an indicator of  
age, a considerable area of the petroglyph  
lonised by biological growths. This suggests  
ently, the nearby vegetation may have been  
sive.

may be the reason why the initials appear to  
ed than others on the rock. The turf may have  
from physical weathering and from being  
mens and algae.

the carving of the initials as an historic,  
phenomenon, perhaps done at a time when the  
was in recession or nonexistent.

ws and a search of several Bedford  
cluding one of 1923) and the 18th and 19th  
names published in Tolsen (1979) two older  
t in Bedford were found to have last names  
I': the Irving family and the Innis family.  
Isner family moved relatively recently to a  
low the Barrens. Ted Innis was interviewed  
s of his family with an 'A' as the first  
no knowledge of any. Tony Edwards contacted  
with the same result.

There was an Ann Irving, however, who appeared in a  
photograph in the Bedford Heritage '30 archives (no. 415).  
The Irving family lived on Borden Street approximately 300  
metres from the petroglyphs.

As it is known that the Irvings left Bedford before 1926  
(Mrs. M. Christie, personal communication) it is reasonable  
to place these initials prior to this time.

The fact that the initials cut the petroglyph also suggests  
that the petroglyph was weathered at the time and, hence, was  
not noticed by the carver of the initials.

If this hypothetical attribution is accepted, therefore, and  
at least 15 or 20 years is given for the original petroglyph  
to weather to relative obscurity, it is possible to speculate  
that it was carved well before World War I. As indicated  
above, it is not possible to determine how far before this it  
might have been done.

#### Eyewitness accounts

As observed earlier, it is apparent that the petroglyphs have  
been virtually invisible prior to their rediscovery in 1983.  
Mark Pasely, for example, who lived a hundred feet away and  
carved the stick figure on the next rock, stated that he had  
never noticed them.

After a number of interviews of long-time residents, it was  
apparent that no direct knowledge of the petroglyphs existed  
prior to 1983.

The only possible eyewitness prior to 1983 is Edward  
Boutilier. He stated that news of the discovery had brought  
back a distant childhood memory of the presence of 'markings'  
on the Barrens where he and his family picked berries. He  
maintains that he did not see them himself: he remembers

someone talking of them, but he took no notice. His family moved to the neighbourhood c. 1919, occupying a house (now demolished) on Borden street directly across from the Irving house. He thinks that this discovery on the Barrens may have taken place c. 1922. Although the markings may have been initials, it seems likely that this would not have attracted the interest that images might.

There was one other report by a former resident who stated that he had seen carvings on a Barrens ridge in 1939. After a further discussion with him, it became clear that he was referring to the ridge across the Bicentennial Highway where inclusions have weathered out into unusual forms (see above).

#### 7. Function - the Meaning and Significance of the Petroglyphs

The interpretation of the meaning and significance of the petroglyphs is, obviously, problematic, as it is not possible to fix the images accurately within time.

Whitehead (n.d.) has presented an iconographic approach to interpretation, using formal similarity between the Bedford petroglyphs and ethnographic examples as a connection in regard to meaning and function, ultimately representing the site as a sacred place. And Molyneaux (e.g. 1983, 1984, 1989) has written extensively about the relation between other rock art sites and aboriginal beliefs and activities, in Nova Scotia and in the Canadian Shield Region.

The question during the present archaeological survey was to determine to what extent any material evidence exists to further support these interpretations or provide other indications of the significance of the Barrens ridges and the petroglyph site. This aspect of the project considered the petroglyphs, and the petroglyph ridge, within a context of

human activity in the immediate area.

The distinct impression gained from interviews with longtime residents is that each section of the Barrens was primarily used by the people who lived nearby. Prior to the destruction of most of the ridge areas, it is likely that region would have been a network of rideways, running along the higher contours of the hills at the head of the Bedford Basin, crossed by numerous footpaths from camps and settlements below.

Considering the ample of areas of rock within easy access, such as the massive and compellingly smooth slope above the cranberry bog, and accounting for the reasonable possibility that petroglyph carving was bound to specific social activities, it is still unusual that the petroglyphs - and the accompanying graffiti - are carved where they are.

There appears to have been a major track that, at present, goes from the end of Centre Street up into the Barrens, until it disappears at the edge of the Bicentennial Highway. The area immediately across the highway was searched unsuccessfully for a continuation of the trail. On a map drawn in 1952 (in the possession of Mr. George Christie), however, this trail is indicated as one that went directly to Jack's Lake, further up in the Barrens.

Because of its proximity to the mouth of the Sackville River, it is suspected that this particular track was a major access route from the mouth of the Sackville River to the Barrens for as long as people have lived there. And the petroglyph ridge is the first of the high and open ridges above the Basin.

Did the non-aboriginal visitors, such as the carver of 'A.I.' or 'G.C.', simply place their initials there because they saw other initials there before them - while not seeing a weathered and overgrown petroglyph? Or was there some other

attribute of this specific rock that all the carvers, Micmac and non-Micmac, responded to? Unfortunately, the presence of houses immediately below the site and at the modern access to the ridge have destroyed any evidence in the immediate area below the rock and any special ambience that might have existed there.

Away from the present development, however, the ridges present what, according to Micmac religious beliefs, would have been compelling areas - striking for their unusual stone pathways above the often dense and dark vegetation of the swales. In accord with Algonkian, and, indeed, with worldwide aboriginal sensibilities, such places could very likely have been treated within a religious context.

Evidence of the impact of the Barrens on later residents may be expressed by the fact that Arthur Lismer, a painter of the Canadian landscape tradition known the 'Group of Seven', painted at least one picture (View of Bedford, 1916) from the Barrens (from a ridge now destroyed by development) and, possibly, another (The Hillside, Bedford, N.S.; in the collection of the Greater Victoria (B.C.) Art Gallery).

Arthur Lismer lived in the town a short distance from the bottom of the main footpath from the mouth of the Sackville River towards Jack's Lake. It is reasonable to suppose that he walked the petroglyph ridge, as it is the most accessible to the neighbourhoods below.

These apparently different uses may be connected: the religious experience of a natural landscape to an aboriginal person may not be that distant from the emotional, aesthetic response of a person who simply seeks repose in such undeveloped places.

It is reasonable, therefore, to state that the Micmac carvings would most likely have been regarded as socially significant at any time in their existence, as they are so

regarded now. It is not possible, on the present evidence, to describe the specific activities that might have taken place at the site, but it is most likely that they would have been part of an integral social, and probably religious, expression, rather than the casual inspiration of a single person.

#### 8. Protection of the Archaeological and Historical Resources in the Barrens - the Problem of Access

The most immediately obvious use of the Barrens ridges is as an efficient means of access along the hills at the head of the Bedford Basin. Some evidence of the relative density of modern use of the Barrens ridges may be provided by the spatial distribution of graffiti on the rocks.

The graffiti are concentrated on the petroglyph ridge: the lowest and most accessible of the fully-exposed ridges, and the one that has been accessible for the longest time. As the presence of initials and dates from the 1920's indicates, the development of the neighbourhoods below the Barrens in the late 19th and early 20th century, especially the building of Division street, Borden and Emerson streets, provided an increasing population with a direct access to this particular ridge.

The graffiti are concentrated at the beginning of the trail. The largest area of rock exposure, at the cranberry bog, has a few initials, whereas the rocks adjacent to the Emerson Street/Division Street access have many more. This includes two examples that appeared during the survey.

The decrease in the density of carving as one moves further from the Division Street/Emmerson Street access suggests that most of the modern human activity has been concentrated along this end. Indeed, the ridge may be regarded as a dead end street. Although it ultimately joins what was the route to

Jack's Lake, the connecting section of the path to the Jack's Lake trail leaves the ridge where its exposure ends and winds through the adjacent swale to the connection point near the Bicentennial Highway.

The most serious problem in the protection of this petroglyph resource is the introduction of new access points, especially from the end of the ridge nearest the cranberry bog and the old track to Jack's Lake. As the natural topography is dominated by the ridge and swale network, any new pathways will undoubtedly connect with the dominant feature of the environment, the quartzite ridges and their spectacular natural structure. As the petroglyph ridge is the closest and most complete, it may be turned into a thoroughfare, drastically increasing the density of use. Under these circumstances, the petroglyphs will be placed under a severe and, perhaps, terminal threat from unintentional, and intentional, defacement.

Given that the significant archaeological and historical resources identified in this survey have been only superficially examined, some promising research areas have been defined and the following future priorities identified:

1. The petroglyphs need to be further examined in order to gain better knowledge of their physical condition, both for the purposes of resolving the question of their manufacture and the extent to which they are eroding.
2. The area around the petroglyphs, overgrown with bushes and trees, under turf and encroached by developed land, needs to be more fully investigated - archaeologically - to determine if any evidence of manufacture or use may be present (such as the remnants of tools or other artefacts, discarded or left beside the rock).
3. The location of Micmac occupation in the Barrens needs to be determined and investigated in an archaeological survey;

this information may add important information to the Micmac history in the area and may be relevant in future interpretations of the petroglyphs and the use of the Barrens.

4. The physical and historical resources related to the Eastwood camp need to be assessed as an aspect of Bedford's past.

It is most important, however, that any future planning in the area consider carefully the issue of access to this sensitive and special environment. The natural conformity of the ridges is such that increases in contact at any point along a ridge will result in an environmental impact for the whole that cannot be controlled. These rare petroglyph resources - one of the few petroglyph sites in Canada east of the Pacific Coast - and the neglected history of the Micmac, demand the serious consideration of all agencies concerned in this project.

## Material Resources

1. Mylar tracings (at the Nova Scotia Museum) of the two Micmac petroglyphs, the 'stick figure', the possible Micmac name 'N.T. McDonald', and numerous sets of initials.
2. Paper casts (at the Nova Scotia Museum) of the two Micmac petroglyphs and the 'stick figure'.
3. Photographs (colour transparencies) of the Micmac petroglyphs, graffiti, the cranberry bog, and the petroglyph ridge.

## Photographs

1. The petroglyph ridge (petroglyph rocks in foreground)
2. Petroglyph site BeCw-2 (view towards nearby development)
3. Petroglyph site BeCw-2
4. Petroglyph BeCw-2.1 (in natural light) (scale = 15 cm)
5. Petroglyph BeCw-2.1 (with side lighting)
6. Petroglyph BeCw-2.2 (in natural light)
7. Petroglyph BeCw-2.2 (with side lighting)
8. The 'stick figure'
9. Graffiti: 'Mark 1975' (in natural light)
10. The cranberry bog
11. The slope above the cranberry bog

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Finally, I would like to express my gratitude to those kind people in Bedford who allowed me into their homes to talk about the Barrens: Mr. and Mrs. George Christie, Mr. Edward Boutilier, Mrs. Eileen Mitchell, Mr. and Mrs. Arthur Beach, Mrs. Mary Joudry, Mr. Dave Pasley, Mr. Mark Pasley, Mr. and Mrs. Stan Johnson and their son, Josh - and Mr. and Mrs. Donald Ross, whose son, Michael, found the petroglyphs in 1983 and initiated an exciting and challenging chain of events.



## Interpretation Resources

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### THE SIGNIFICANCE OF THE NATURAL AND CULTURAL HISTORIES OF THE BEDFORD BARRENS: POSSIBLE APPROPRIATE USAGE OF THE AREA

Prepared for: The Parks and Recreation Dept. and  
the Petroglyph Advisory Committee  
Town of Bedford  
Bedford, Nova Scotia

Prepared by: Interpretation Resources  
Truro, Nova Scotia

Art Lynds, Ecologist

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Mary's University)

April, 1991

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Preservation Commission (1982)

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PREFACE

The Barrens is an area of approximately 90 acres on private land in the central region of the town of Bedford. At present this parcel of land is undeveloped. This area does, however, contain within its boundary two authenticated aboriginal petroglyphs.

The purpose of this study is, in general, to highlight the environmental, geological, cultural, historical, and recreational significance of the Barrens. Further, in more specific terms, this report addresses the following:

- 1) the environmental and geological significance of the Barrens area within the Town;
- 2) the cultural and historical significance of the Barrens area;
- 3) the integration of the Barrens, as a passive recreational area, into the Town's overall park system; and,
- 4) the tourism and education potential of the Barrens.

This report consists of two independent studies, one being the archaeological investigations of the Bedford Petroglyphs, the other, a biophysical inventory of the Bedford Barrens Site. They are both presented as separate documents as part of this report.

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SECTION 1

CULTURAL AND HISTORICAL SIGNIFICANCE

OF THE BARRENS AREA

INTRODUCTION

This report is structured to follow the TASKS: as outlined in the INVITATION TO SUBMIT ESTIMATES TO UNDERTAKE A STUDY ABOUT THE APPROPRIATE USAGE OF THE BEDFORD BARRENS (Appendix A). In part it contains information derived from technical documents related to petroglyph studies and addresses the concerns and issues expressed at meetings and consultations held with various groups and individuals (Appendix B). In order to place these into a general perspective it is necessary to have an appreciation of the study of rock art and its applicability to the Bedford petroglyphs.

The professional study of rock art as it appears throughout North America and many other areas of the world is directed towards answering a set of basic questions. These are:

1. Who created the images?
2. When were they created?
3. Why were they created?
4. What information can be gleaned from them about the creator?

Unfortunately, unless the actual creator is available, most, if not all of these questions will lack definitive answers. In his technical report Mr. Brian Molyneaux attempted to address these questions. Since their discovery by Michael Ross in 1983, the consultant has shown various professionals the actual site or photographs or tracings of the glyphs, none have dismissed them as being anything other than authentic petroglyphs. This conclusion is further substantiated by Molyneaux's report (1990:21-22). He accepts, as does this consultant, the work of Ms. Ruth Whitehead (n.d.), Assistant Curator in History, Nova Scotia Museum who has

demonstrated the association of the petroglyphs to the Micmac.

2.

The questions of age determination can not be directly answered. Molyneaux places them "well before World War I" (1990:25). His determination is probably the best that can be given at this time. The only physical technique available that could be used to provide a relative date is lichenometry. However, according to Taylor, since dating using lichenometry is of dubious value, it can be concluded that safe removal of lichens should take precedent over their potential use in dating (Taylor, et.al. 1977:305).

Rock art literature records a number of possibilities as to why images are left in stone. In a general sense and not specific to the Bedford Petroglyphs these include:

1. **CEREMONIAL:** The oral traditions and ethnohistoric accounts of the Native Peoples of North America contain references to individual's relationships with nature. These relationships are expressed by images portrayed in various forms of rock art including petroglyphs.
2. **MNEMONIC:** Rock art images are created as memory aides. They are records of the past that reflect traditional beliefs often portraying legends and images of cultural heros.
3. **CHRONICLE:** The images are made to record an event which is important in the life of an individual or group.
4. **SYMBOLIC:** Rock art has been interpreted as a form of individual or group identification through symbolism.
5. **ART:** The images placed on stone reflect an individuals desire to be creative solely for personal satisfaction.
6. **DOODLING:** Some forms of rock art have been interpreted as representing a form of amusement to pass time.

In his report Molyneaux states "It is not possible to determine absolutely the specific origin, or the original meaning and function, of the petroglyphs" (1990:21). He later notes that; "The interpretation of the meaning and significance of the petroglyphs is, obviously, problematic, as it is not possible to fix the images

3.

accurately within time" (1990:26). Earlier in his report he references the unpublished work of Ruth Whitehead, Assistant Curator in History, Nova Scotia Museum (Ibid: 2-3). In her study (quoted from Molyneaux 1990:3);

She showed examples of forms similar to two of the petroglyphs in Micmac art and ideographic writing and, with this convincing analogical evidence, used the iconography of the ethnographic symbols as a means of interpreting the petroglyphs and the function of the site. As celestial forms were linked in Micmac iconography to religious belief, she suggested that the area of the petroglyphs was most likely a site of shamanic activity (Whitehead n.d.: 6).

The question of function and meaning of the petroglyphs can not be answered with the data on hand. However, the professional consensus is that it lies within the realm of ceremonial.

The fourth issue discussed in most rock art studies obviously hinges on successfully addressing the first three. As these remain "problematic" little can be added at this time.

The remainder of this report will discuss the various TASKS given to the consultant as they relate to the cultural and historical significance of the Barrens area.

**TASK 1)** review background materials, including the 1990 Molyneaux Report and Bedford Parks and Recreation Implementation Strategy;

The 1990 Molyneaux report has been reviewed and in terms of the methodological approach and subsequent interpretations it is judged to represent a highly professional report. Although the principal focus of this effort was directed towards the petroglyph site two additional cultural resources have been identified by Molyneaux in his report. These are the Eastwood camp and a possible late 19th early 20th century Micmac camp. At this time these sites have been

4.

reported to the Nova Scotia Museum as part of the Molyneaux report. They are therefore granted the same level of protection as the petroglyph site (see relevant sections of the Special Places Protection Act as quoted under TASK 2).

Given the decision by the Bedford Town Council to rezone the Bedford Barrens for residential development it is now the responsibility of the Developer to ensure that these resource sites are adequately assessed.

**TASK 2)** contact the Nova Scotia Museum to be familiar with the work underway to prepare regulations for the Special Places Protection Act:

The consultant met with Mr. Robert Ogilvie, Curator of Special Places, Nova Scotia Museum to discuss this TASK. The meeting dealt specifically with the degree of protection offered the site. The consultant made notes and followed the meeting with a formal written request to the Museum for clarification on the above issue as well as a number of others (related to TASK 4) which were expressed at a meeting with the Bedford Parks Planning subcommittee. The response to this request is included within this report (Appendix C). In terms of the Special Places Protection Act 1980 with Amendments from C.45, S.N.S. 1990, the following level of protection is offered.

**Current status of petroglyphs (Museum's Position)**

The petroglyphs themselves are already protected with or without designation; however, the adjacent area is not (No. 1 Appendix C).

**Regulatory Overview**

**Designation of protected site**

7 (1) The Minister, with the approval of the Governor in Council,

5.

may designate any land within the Province, including land covered with water, that has outstanding archaeological, historical or palaeontological significance as a protected site. The site as noted above is protected although it has not been designated (see Appendix D).

**Stop order**

13 (1) When, in the opinion of the Minister, any special place, whether designated or not, is threatened with destruction by reason of commercial, industrial or other development or activity, the Minister may order the development or activity to cease in whole or in part for thirty days and, upon the recommendation of the Minister, the Governor in Council may continue the order until a site survey and, if necessary, a site investigation and salvage is carried out under the direction of the Museum. 1990, c.45, s.7

**Funds for site survey or salvage**

(2) When such a development or activity is carried out by a government agency or a developer, the Governor in Council may require that funds be provided by that department, agency or developer to cover the costs of site survey, investigation and salvage. 1990, c.45, s.7

**Offence and penalty**

22 (1) Every person who contravenes any provision of this Act or who, being the holder of a permit, fails to comply with any term or condition of any permit issued under this Act is guilty of an offence and is liable on summary conviction to a penalty not exceeding ten thousand dollars. 1990, c.45, s.13

(2) Where a corporation is convicted of an offence against this Act, the maximum penalty that may be imposed the corporation is one hundred thousand dollars and not as provided in subsection

(1) 1990, c.45, s.13.

**TASK 3)** consult with representatives of the Native community for their input regarding the significance of the petroglyphs;

As noted in Appendix B the Consultant for the cultural and historical significance of the Barrens area held discussions with prominent members of the Native community. These included:

Mr. Noel Knockwood  
Captain and Spiritual leader of the Micmac Nation

Mr. Don Julien  
Secretary Treasurer and Research Director  
The Confederacy of Mainland Micmacs

Unsuccessful attempts were made to contact Dr. Peter Christmas, Micmac Association of Cultural Studies prior to the Petroglyphs Advisory Committee (PAC) meeting of 20 March 1991. Unfortunately due to the fact that Native representation was temporarily removed from the Petroglyph Advisory Committee combined with media misrepresentation of the meeting (see Appendix B and clippings) the consultant was placed in a position of mistrust amongst the Native community (see Appendix E).

The consultant was able to have a lengthy telephone discussion with Dr. Christmas on 4 March 1991 with a meeting in Halifax on the following day. The meeting was attended by the consultant, Chief Leonard Paul, Chairman of the Micmac Association of Cultural Studies and Dr. Christmas. The views of the Native peoples were discussed as well as the events surrounding the lack of Native participation in the decision making process.

Although it should be obvious, it may need restating, that whoever made the decision to excluded direct representation by Native peoples within the decision making process committed a serious error in judgement.

**TASK 4)** consult with archaeological experts on the Advisory Committee, and elsewhere as necessary, regarding appropriate methods of protecting the petroglyphs and for providing interpretive information to the public;

To accomplish this TASK the consultant reviewed existing literature on rock art conservation and consulted with the members of the Conservation Branch, of the Canadian Parks Services in Ottawa. The general consensus among professionals involved with rock art conservation is that two primary factors are responsible for damaging rock art: man and the natural process of rock weathering (Taylor et.al. 1977).

#### Protection of the Petroglyphs from Man

The protection of petroglyphs sites is seen as a question of management. Currently two management schemes are applied to rock art sites throughout the world (Conway 1977). The first is Open Site Management, that is, the location of a site is made public. When this occurs it becomes incumbent for a responsible agency to insure that the site is protected. This can be accomplished by legislation (already in place for the Bedford petroglyphs) fencing, warning signs, education and the use of wardens or caretakers.

The protection methods used in Open Site Management have generally failed to protect the heritage resources. Although the Special Places Protection Act provides a stiff penalty against defacement or any other form of damage to the petroglyphs it will be difficult to enforce. The use of fencing and signs only serves to attract attention to the exact location of the site.

Public education has often been a component of Open Site Management. It is used to make people aware of the history and importance of rock art sites. However, in South Africa and Lesotho, which have introduced rock art topics into the education system as well as making their sites high profile this has failed. In Lesotho, Smits (1975) has observed "that while this has led to increased interest and visitation it has also led to an increase in

damage" (quote from Taylor et.al. 1977). Avery (1975) reporting on South African sites notes "improved communication and consequent accessibility of sites has merely aggravated the problem".

The use of wardens or caretakers is another component of open site management. This would require the cooperation of area residents along the lines of a neighbourhood watch program. It is possible to install electronic surveillance devices on the site to assist in such a program. However, this places a high degree of responsibility on an individual to monitor the site and basically take responsibility for its protection. Electronic surveillance was considered for the White's lake site but ruled out due to this high level of responsibility and the failure of such systems to distinguish between a vandal, animal or just a passing individual. To quote the experts;

it would appear that we may be fooling ourselves if we think that a combination of legislation, signs, fencing, and education, is the answer. While the majority of people will respect the rock art it takes the actions of only one to ruin or seriously damage a site (Taylor et.al. 1977:312).

The second management scheme is Closed Site Management which effectively is keeping the location of the site a secret. In effect this was applied to the Bedford petroglyphs between 1983 and 1987. However, now that various issues beyond protection have focused attention on the site within the media (see clipping file) this appears to no longer be a viable option.

The misunderstanding in the 21 March 1991 Mail-Star article headlined "Bury Barrens petroglyphs-expert" was part of a series of options suggested by the consultant to try, at least in the short term, to revert back to the Close Site Management scheme.

#### **Protection of the Petroglyphs against Natural Weathering**

The growing field of Rock Art Conservation has generated

considerable data on the effects of natural weathering of sites. Rather than attempting to summarize all of the agents responsible for rock decay the ones affecting the Bedford site will be discussed. These include moisture, temperature change and biological growths.

The potentially most damaging natural elements to the Bedford petroglyphs are moisture and temperature. In the course of a year they undergo considerable temperature changes and different levels of precipitation. The most damaging time is during the freeze-and-thaw cycles of early winter and late spring (Dewdney 1970:38). It is during these seasons that ice movement may abrade the glyphs. Another factor which is a particular problem with this site is that it is situated in an urban area. Dissolved carbon dioxide (Acid Rain) in urban atmospheres can be highly corrosive to certain types of rock (Winkler 1976).

The effect that moisture penetration has on rock is a complex subject and depends a great deal on the type of rock and its local environment. The Bedford petroglyphs are almost constantly in a wet environment which means they are subject to moisture penetration. When water enters a rock it can dissolve or leach the more soluble elements leaving a chemically weathered or degraded rock. The weathering process will cause weaknesses to form below the surface of the rock which will eventually result in cracking or spalling. The changing temperatures can contribute to this process, in that, rocks expand and contract during such changes which mechanically weakens the rock and leads to increased moisture penetration. Although the petroglyph surfaces appear relatively intact at this time the consultant has seen this combined weathering process elsewhere along the ridges.

Biological growth also contributes to the weathering of rock. Certain species of bacteria, algae, fungi, lichens, mosses and higher plants will play a role in the deterioration of rock surfaces. As noted in the section on dating the potential of lichens for determining the relative age of a site has been the

focus of considerable research. This attention has also been directed at the affects that lichen have on altering the surface of petroglyph sites.

The major problem is that lichens "... act as a primitive water reservoir for the algae layer. The medulla in crustose lichens is in direct contact with the substratum and this increases greatly the possibility of chemical dissolution creations." (Syers and Iskandar 1973:230). In other words, the lichens create a differential drying of the rock surfaces. Areas with lichens hold moisture longer than surrounding areas, thus the problem of moisture retention and temperature change can be accelerated.

The higher plant growth around the Bedford petroglyphs will in time cause problems. In the eventuality that weathering causes fractures in the rock surface this will allow the possibility of root penetration in the substrate. As the plants grow the roots will cause accelerated spalling of the rock surface.

This brief discussion of the effects of man and the elements on petroglyph sites serves to illustrate the complexity of the problem of site protection. Again, to quote the experts "Apart from the construction of climate-controlled enclosures around the sites, we do not now possess the technology necessary to prevent a rock exposed to the elements from weathering." (Taylor et.al. 1977:307).

In recognition of this problem a priority for the Bedford petroglyphs is to have them recorded. In essence this has been partially completed through the efforts of Whitehead and Molyneaux who have taken photographs and have done tracings of the images. However neither of these mediums constitute a long-term record. With care and the use of archival quality storage systems the average life of color transparencies is 40 years. Mylar tracings have a tendency to fade and crack with age and depending upon use can deteriorate fairly rapidly. The consultant has discussed the recording of the petroglyphs with the Conservation Branch of the Canadian Parks Services and they have indicated a willingness to help. They propose to use a vulcanized rubber compound to make an

exact replica of the glyphs. These can be transferred to copper plates which, with proper storage, have a long shelf-life. It should be noted that the consultant has no authority to initiate this activity, it exists as an option which will require the consent of all parties involved.

### Interpretation of the Bedford Petroglyphs

The interpretation of the petroglyphs presents a problem. The general discussion regarding the professional study of rock art throughout the world noted that four basic questions are most often asked. To date none of these have been adequately answered for the images within the Barrens. In addressing these various questions researchers have used words such as, "problematic", "most likely", "appears to be", "reminiscent", etc. These combined with Molyneaux's conclusion that "It is not possible to determine absolutely the specific origin, or the original meaning and function, of the petroglyphs" (1990:21) highlights the problem of interpretation. To quote another expert;

Attempting to interpret the meaning or function or rock art is often risky, since this art usually involves a high degree of symbolism as well as being produced by people whose perceptions and ideologies were distinctly different from those of modern researchers attempting the interpretation (Keyser 1977:171).

As has already been mentioned the general concensus is that they are of Micmac origin and represent symbols identify a "sacred place". As they are symbolic images that may depict a personal experience of spiritual significance they defy interpretation.

Throughout the consultation process the various groups involved have attempted to define the limits of a "sacred place". Unlike

12.

notions found in Christianity where sanctity (anything held sacred) is often definable by a man made feature (church, wailing wall, stations of the cross) this seldom applies to Native American Concepts of sacredness.

Nature and natural settings are paramount within the concept of sacred place amongst Native peoples. This includes the notion of vista, that is, a place that provides a feeling of oneness with nature. The location of the Bedford petroglyphs may well have provided such a feeling in the past. However, as Molyneaux has stated:

Unfortunately, the presence of houses immediately below the site and at the modern access to the ridge have destroyed any evidence in the immediate area below the rock and any special ambience that might have existed there (1990:28).

The consultant is unable to provide an areal limit to the "sacred place" nor is it definable with additional research.

**TASK 5)** Consult with the Bedford Recreation Advisory Committee with respect to integrating the study area into the Town's park and recreation system. The Recreation Advisory Committee is to be asked to provide input with respect to:

- a) park and recreational needs in the area;
- b) land allocations for specific needs/purposes; and,
- c) how protecting and providing for the interpretation of the petroglyphs should fit into the park and recreation system;

The consultant met with Bedford Parks Planning, a subcommittee of

13.

the Recreation Advisory Committee, on 04 March 1991. Various concerns were noted as they related to the petroglyphs. During this meeting, the specifics of the "Terms of Reference" as they applied to the cultural and historical significance of the Barrens area were called into question by committee members. In particular, this consultant's input into the Eastwood Camp and the possibility of the existence of the late 19th early 20th century Micmac camp was questioned. The concerns and issues related to protecting and interpreting the petroglyphs are the same for this TASK as TASK 4 (above).

**TASK 6)** identify possible funding sources to acquire the Barrens and provide protection of the petroglyphs.

The issue of funding now appears to be a mute point as it applies to the entire Barrens area (see clipping file Daily News 9 April 1991 and Mail-Star 10 April 1991). However, the protection of the petroglyphs remains as a priority for all concerned. The provincial government is ultimately responsible for the protection of heritage resources within Nova Scotia through the Special Places Protection Act.

#### Duties and Powers under the Special Places Protection Act

6 The Committee shall be responsible to the Minister and shall have power to:(a) make recommendations to the Minister concerning the administration, classification and acquisition of special places;

**TASK 7)** consult with officials in the Nova Scotia Department of Tourism and Education, and relevant bodies within the

14.

Town, about the significance of the petroglyphs and the Barrens in relation to their department's/bodies' current or prospective programmes.

The consultant met and corresponded with representatives of the Nova Scotia Museum a branch of the Nova Scotia Department of Education regarding interpretation of the petroglyphs (Appendix C). The topic of tourism was also discussed at various meetings with town committee's.

As stated previously and in the interim report this TASK cannot be addressed without consultations with the Native peoples. This is made clear in the letter from the director of the Nova Scotia Museum (Appendix C No. 4).

#### RECOMMENDATION

**THE PROVINCE OF NOVA SCOTIA AND THE TOWN OF BEDFORD SHOULD INITIATE A POLITICAL PROCESS WITH THE NATIVE PEOPLES TO RESOLVE THE OUTSTANDING ISSUES RELATED TO THE BEDFORD BARRENS.**

In light of the above recommendation and the current political climate surrounding the Barrens two additional documents are included for consideration. They are:

- 1) The Draft report 11/2/91 of the **EASTERN WORKING COMMITTEE** for the **Task Force on Museums and First Peoples** (Appendix F).
- 2) The declaration of principle (18/02/91) which came from the **ABORIGINAL ARCHAEOLOGICAL SYMPOSIUM** and was read by Mr. Noel Knockwood, Captain and Spiritual Leader of the Micmac Nation at the 3 April 1991 public meeting (Appendix G).

#### References Cited

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16.

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## INVITATION TO SUBMIT ESTIMATES TO UNDERTAKE A STUDY ABOUT THE APPROPRIATE USAGE OF THE BEDFORD BARRENS

### OBJECTIVE.

The Barrens is an area of approximately 90 acres located in central Bedford, as indicated on the attached map. It is an undeveloped area of land. Two aboriginal petroglyphs have been discovered on this site and have been authenticated.

The Petroglyph Advisory Committee has been charged by Town Council to "...make recommendations to Town Council on the future use and/or protection of these lands...." The Committee has unanimously agreed that it should proceed to obtain further expert advice about the environmental, geological, cultural, historical, and recreational significance of the Barrens.

The Petroglyph Advisory Committee is seeking cost and time estimates from consultants to undertake a study to provide information and further advice about:

- 1) the environmental and geological significance of the Barrens area within the Town;
- 2) the cultural and historical significance of the Barrens area;
- 3) the integration of the Barrens, as a passive recreational area, into the Town's overall park system; and,
- 4) the tourism and education potential of the Barrens.

### TASKS:

The consultant is to:

- 1) review background materials, including the 1990 Molyneaux Report and Bedford Parks and Recreation Implementation Strategy;
- 2) contact the Nova Scotia Museum to be familiar with the work underway to prepare regulations for the Special Places Protection Act;
- 3) consult with representatives of the Native community for their input regarding the significance of the petroglyphs;
- 4) consult with archaeological experts on the Advisory Committee, and elsewhere as necessary, regarding appropriate methods of protecting the petroglyphs and for providing interpretive information to the public;
- 5) consult with the Bedford Recreation Advisory Committee with respect to integrating the study area into the Town's park and recreation system. The Recreation Advisory Committee is to be asked to provide input with respect to:
  - (a) park and recreational needs in the area;
  - (b) land allocations for specific needs/purposes; and,
  - (c) how protecting and providing for the interpretation of the petroglyphs should fit into the park and recreation system;
- 6) identify possible funding sources to acquire the Barrens and provide for the protection of the petroglyphs; and,
- 7) consult with officials in the Nova Scotia Department of Tourism and Education, and relevant

bodies within the Town, about the significance of the petroglyphs and the Barrens in relation to their department's/bodies' current or prospective programmes.

#### REPORTING

The consultant shall report to the Committee. Assistance in obtaining background reports and mapping shall be provided by staff of the Town's Planning Department. The consultant shall report to the committee on two occasions to report on progress, first with an interim report and later with the final report.

#### STUDY RESULTS

A written report (one copy, complete with diagrams, photographs, etc.) shall be provided to the Petroglyph Advisory Committee dealing with each of the items listed above and with such other matters as the consultant thinks pertinent to these. This report will become the property of the Town of Bedford to be reproduced as required.

#### QUALIFICATIONS

The consultant is to have expertise in environmental assessment to examine the vegetation and geological features of the Barrens and provide a comparative analysis to other areas within the Town. The consultant should have expertise in recreation planning. Expert knowledge of aboriginal culture and issues would be an asset, but awareness of and sensitivity to these cultures and issues is essential.

#### PROJECT ESTIMATE

The consultant is to provide an estimate of the time required and cost to undertake this study. The Petroglyph Advisory Committee will select the consultant and will seek approval for the necessary funding to have the study undertaken. Estimates shall be submitted no later than 4:00 p.m. on December 28, 1990.

Appendix B

Chronology of Events:

1. First unofficial notification that Interpretation Resources was to be awarded the contract 17 January 1991 in Mail-Star article entitled: "Barrens protection plan said too costly," by Steve Proctor Sackville Bureau.
2. Second unofficial notification that Interpretation Resources was to be awarded the contract 23 January 1991 in Mail-Star article entitled: Barrens committee head resigns," by Steve Proctor Sackville Bureau.
3. 24 January 1991 telephoned Mr. Steve Proctor and questioned his information in particular the fact that both articles stated: "The proposal was submitted by a consulting group headed by archaeologist Steve Davis, a professor at Saint Mary's university" (17/01/91), "Coun. Len Goucher stormed from a council meeting after Bedford council failed to back the committees request to have the 90-acre area studied by a firm headed by St. Mary's University archaeologist Steve Davis" (23/01/91). When it was pointed out to Mr. Proctor that I was subcontracted to Interpretation Resources and not its head his justification was that he knew that but that I was better known in the community. He promised that all future reports would clarify this aspect of the contract.
4. 12 February 1991 received telephone call from Ms. Dawn Suzuki a Micmac who expressed her concerns over the Barrens and the fact that the town did not have Native participation on its Advisory Committee.
5. 22 February 1991 Notified by Telephone from Art Lynds that the contract had been awarded and could I attend meeting of Bedford Parks Planning subcommittee also that an Interim report was due 11 March.
6. 01 March 1991 Consulted with Robert Ogilvie, Curator of Special places, Nova Scotia Museum to discuss provincial concerns.
7. 04 March 1991 Attended meeting of Bedford Parks Planning, a subcommittee of the Recreation Advisory Committee, LeBrun Recreation Centre. 36 Holland Avenue, Bedford.
8. 07 March 1991 Received telephone call from Mr. Michael Roughneen.
9. 07 March 1991 Consulted with Mr. Noel Knockwood, Captain and Spiritual Leader of the Micmac Nation.
10. 08 March 1991 Consulted with Mr. Don Julian Secretary Treasurer and Research Director, Confederacy of Mainland Micmac.
11. 09 March 1991 Consulted with Mr. Robert Ferguson, Archaeologist with Canadian Parks Services, Halifax.
12. 10 March 1991 Consulted with Mr. Michael Harrington, Conservation Division, Canadian Parks Service, Ottawa.
13. 11 March 1991 Filed Interim (Progress) report with Mr. Steve Moir, Office of the Director of Planning and Development Town of Bedford.
14. 20 March 1991 attempted to contact Dr. Peter Christmas, Micmac Association of Cultural Studies.
15. 20 March 1991 attended meeting of Petroglyph Advisory Committee.
16. 21 March 1991 Headline in Mail-Star reads "Bury Barrens petroglyphs-expert" article by Ms. Andrea Nemetz. First paragraph reads: "Replicas should be made of the Micmac rock carvings on Bedford Barrens and the originals buried, says an expert hired by the town to study the cultural and historical significance of the area." Minutes of the 20 March 1991 PAC meeting state: "With regard to the original glyphs, Professor Davis has considered the option of burying them but will investigate this possibility further with engineering professionals as he is concerned about water/humidity damage" (4.2.1 page 4).
17. 22 March 1991 Discussed article above with Ms. Andrea Nemetz she claimed she submitted a more detailed article which was cut by her editors.
18. 02 April 1991 Art Lynd telephoned to see if I would be attending public meeting. I agreed and strongly suggested that it would prudent that other team members be present.
19. 03 April 1991 Received facsimile of letter to Mayor Christie from Chief Leonard Paul, Chairman, Micmac Association of Cultural Studies.
20. 03 April 1991 Attempted to contact Chief Leonard Paul and Dr. Peter Christmas.

Nova Scotia


**Department of  
Education**

Nova Scotia Museum Complex

March 13, 1991

 Nova Scotia Museum  
 1747 Summer Street  
 Halifax, Nova Scotia  
 B3H 3A6

902 429-4610

Our file no:

21. 03 April 1991 Attended public meeting in Bedford Firehall.
22. 04 April 1991 Consulted with Dr. Peter Christmas, Micmac Association of Cultural Studies.
23. 05 April 1991 Picked-up copy of Minutes for the 20 March 1991 meeting of the Petroglyph Advisory Committee.
24. 05 April 1991 Compiled complete dossier of notes, correspondence and other relevant documents.
25. 05 April 1991 Met Chief Leonard Paul, Chairman and Dr. Peter Christmas of Micmac Association of Cultural Studies. Gave each a copy of the dossier noted in 24 above and consulted on the issues todate.

 Dr. Stephen A. Davis  
 Dept. of Anthropology  
 Saint Mary's University  
 Halifax, N. S.  
 B3H 3C3

Dear Steve,

I am writing in answer to your letter to Bob Ogilvie as you have requested information on the Museum's position regarding the Bedford Petroglyphs.

1. The petroglyphs themselves are already protected with or without designation; however, the adjacent area is not.
2. In order to encourage physical protection we would suggest there be a buffer zone around the petroglyphs. The size and the boundaries of that buffer zone obviously require discussion. We are not able to recommend one kind of physical protection over another at this time. Obviously the amount of resources available have some bearing on our choice. I suggest you discuss protection with Parks Canada due to their experiences.
3. Certainly interpretation will have to be handled with care but it is not uncommon to see labels that refer to sexual imagery.
4. I believe that there will be problems with altering the site and perhaps with interpreting the site. This is where the participation of the Micmac community is extremely important.

As you said in your letter, this is a complex issue with many players, all of whom must be consulted.

Yours sincerely,

 Candace Stevenson  
 Director  
 Nova Scotia Museum Complex

CS/prg

Department of Anthropology



June 15, 1987

Mr. Robert ...  
Director of Special Places  
17-1 ...  
Halifax ...

Dear Mr. ...

Further to our conversation regarding the Bedford Petroglyph site, it is my opinion that this location should be protected as a special place. This is based upon a number of reasons. To the best of my knowledge this is the only petroglyph site in Nova Scotia which has not been vandalized. It is also a unique natural site as are the glyphs in itself. Further it is the only petroglyph site in the metro area. The glyphs have been completely and irreversibly vandalized and many more have been removed and destroyed.

The cultural significance of the site has yet to be determined as they have not been the focus of a detailed study. However, professional interest has been shown by Brian ... from the Ontario Museum and Mark Hedden, Main Historic Preservation Commission (correspondence enclosed).

Should the site be threatened I would recommend the following action. The bedrock outcrop on which the glyphs are located should be excavated to check for other burial sites. Existing glyphs should be cleared of their lichens, mosses, lichen and other drawings made. I believe this can be done without damaging the glyphs. If at all possible a soil sample should be contacted to record the species and growth rate representative of the glyphs prior to the removal of the lichens. This would provide a relative date for the glyphs.

Should you require further information please do not hesitate to contact me at your convenience.

Sincerely,

*Stephen A. Davis*

Stephen A. Davis

SAD:rw  
Encl.

P.S. My notes record that I notified Kelly O'Brien, Bedford Town Office of the existence of the site on 28 April 1984.

# Micmac Assoc. of Cultural Studies

P.O. Box 961  
Sydney, Nova Scotia B1P 6A4  
Micmac Post Office  
Telax 019-35215  
Telephone (902) 539-8037  
Hants County, Nova Scotia

April 3, 1991

Mr. Peter Christie  
Mayor,  
Town of Bedford  
Suite 400  
1496 Bedford Highway  
Bedford, N.S.  
34A 1E5

Dear Mayor Christie:

The Board of Directors at a meeting held in Halifax, March 27, 1991, passed a resolution to reject the findings, conclusions, and recommendations of the archaeologist, Stephen Davis.

We feel that the Bedford Petroglyph Advisory Committee has abrogated its responsibility to consult fully with the Micmac Nation. We had not had a chance to read, review, and study Mr. Davis' findings which we find demeaning, simplistic, and expedient and lacking in appreciation of our traditional beliefs.

We have had many experiences with governments bulldozing our problems, or simply burying them and hoping that they will go away--out of sight, out of mind.

On Behalf of the Undersigned  
Board of Directors,

*Janice D. Paul*  
for  
Chief Leonard Paul  
Chairman

CLP/jap  
Enc.

Task Force on Museums and First Peoples  
Groupe de travail sur les musées et les Autochtones  
280 Metcalfe, Suite 400 Ottawa, Ontario K2P 1R7

EASTERN WORKING COMMITTEE

DRAFT 11/2/91

TOWARDS  
A PARTNERSHIP BETWEEN  
ABORIGINAL FIRST NATIONS AND MUSEUMS

INTRODUCTION

Museums have developed as a memory locus for a person, a region, a culture or a nation. Their role is to "interpret the past, explain the present, and thereby illuminate choices for the future."<sup>1</sup> In order to accomplish their goals they must express objectively, accurately and in context, the culture and spirit of the civilizations that they portray. If museums are to "contribute to our understanding of the roles played by Aboriginal people in the development of our country"<sup>2</sup>, then these goals and methods must include a bilateral approach by museums and Aboriginal First Nations.

Historically, the memory locus of the First Nations has been in the minds of the Elders, who have passed to each succeeding generation oral heritage, tradition, and sacred and political beliefs and practices. Material culture has been transferred through the generations from keeper to keeper along family, clan or tribal lines. These practices have always been democratized and have served "to interpret the past, explain the present and illuminate choices for the future"<sup>3</sup> for the community and the nation.

By contrast, western or Canadian museums began as the "property of the nobility and Church, with only the privileged able to enjoy the treasures of civilization."<sup>4</sup> Even after governments began to support such cultural institutions, they were still considered esoteric and the milieu of the privileged or of academics. But gradually museums became important institutions on the public agenda, and democratization became an ongoing priority.

The coming together of these two cultures, one which promotes institutions without walls and one which found difficulty opening doors, has been problematic. To complicate matters, the communication process of museums has often served to promote and legitimize notions of Euro-Canadian ethnocentrism. Such institutions have failed to interpret the past and explain

Comments appreciated.

Robert McChes  
CMC, Hull  
(819) 994-6116  
Fax (819) 993-9388

the present of First Nations, thereby obscuring choices for the future. Recognizing the reality that national and regional cultural institutions currently serve as repositories of Aboriginal material culture and have the capacity to present those cultures to the First Nations and the general public, First Nations and museums are developing a dialogue which promotes a commonality of interest and a solution to conflict.

It is recognized that establishment of such a commonality of interest can be accomplished only through questioning some of the basic concepts upon which traditional museums are based, and some of the basic concepts upon which First Nations people object to traditional museum practices. For example, the concept of academic freedom has often been divorced from the concept of responsibility to the community, has not been clearly separated from constitutional guarantees of personal freedom of speech, and has resulted in inaccurate and negative portrayal of First Nations. Likewise, contemporary societies are beginning to recognize that the specific interests of the scientific community must be accommodated to the needs and best interests of society at large. In this context, the scientific concerns of museums must be accommodated to the spiritual and cultural imperatives of the First Nations. First Nations people must also recognize the worth of scientific investigation and reporting, as a valuable means of obtaining and interpreting information on matters of culture and heritage.

In order to reflect the heritage of Aboriginal First Nations and the spiritual and social values of these diverse cultures within Canadian museums, it is necessary to develop new relationships based on museum principles and government policy which recognize and affirm First Nations culture and heritage.

References:

1. Communications Canada, 1988. Challenges and Choices: Federal Policy and Program Proposals for Canadian Museums. p.25.
2. Canadian Museum Policy, 1990. p.15.
3. Ibid. p.25
4. Ibid. p.7

PRINCIPLES TO ESTABLISH A  
CO-OPERATIVE PARTNERSHIP BETWEEN  
ABORIGINAL FIRST NATIONS AND CANADIAN MUSEUMS

1. EMPOWER FIRST NATIONS

Appropriate First Nations will be involved in a participatory manner in any process, program or project which has as its goal the interpretation of the past, the explication of the present or the illumination of the future or choices for the future of Aboriginal heritage, history or culture. This participation of first Nations should be organized through Elders, traditional people, women's groups, artists associations and other knowledgeable cultural groups.

2. EQUALITY IN LAW

In respect to ownership or rights to artifacts or items of material culture in the possession of museums, traditional or customary laws of First Nations will be considered of equal force, right and application as Canadian civil, customary or common law. In addition, the notion of stewardship in partnership with First Nations communities in respect to such holdings should be expressed in the form of principles, policies and procedural manuals of museums.

3. COMMONALITY OF INTEREST

First Nations and museums will establish a commonality of interest in the education of various publics in the richness, variety and validity of the heritage and culture of First Nations, through the participatory involvement of the appropriate First Nation or Aboriginal community in the educational process.

4. INTERPRETATION

Every museum having custodial care of artifacts or representing First Nations in their programming, must involve the appropriate First Nation in a participatory manner from inception of any interpretive project, program or process. Such involvement shall include the processes of research, implementation, presentation and maintenance. Interpretation or representation of information relating to First Nations must conform to a code of responsibility to the community represented, as well as to the academic or professional ethics of the interpreter.

5. DISCLOSURE

Museums having custodial care of First Nations artifacts will provide the appropriate First Nations communities and interested publics with a general statement of inventory of the holdings, past and present acquisition practices, and constraints which exist on disposition of material.

6. HUMAN REMAINS

The human remains of First Nations people are sacred to most of the First Nations cultures extant within the land mass of Canada. Regional First Nations should participate in decisions in respect to the treatment of the human remains of first Nations people, whether or not the remains are affiliated with the regional First Nation. The retention of human remains for prolonged periods for any reason is not acceptable.

Remains of individuals whom evidence indicates are remembered by name must be returned for disposition on the request of the families, their descendants or clan, upon notification of the appropriate groups. Human remains which evidence indicates may be affiliated with a named First Nation must be reported to that Nation, clan, tribe or family. The appropriate Nation will, in cooperation with the museum, work with scientific interests for an agreed upon period, and have the remains re-interred according to the appropriate traditional or other religious practice of the First Nation or Aboriginal community. Remains which are ancient or which cannot be affiliated with a named First Nation, should be reinterred after a reasonable period, in a manner consistent with local traditional practices. Museums which acquire human remains through any means must involve the appropriate First Nation in a participatory manner, as to the treatment and disposition of the remains.

7. SACRED AND SENSITIVE MATERIAL

Many First Nations hold certain objects or archival material to be sacred or sensitive. Such material requires the participatory involvement of the appropriate First Nation in their treatment or disposition.

RECOMMENDATIONS IN RESPECT  
TO  
FEDERAL POLICIES

1. Federal policy in respect to museums will be developed to promote and support the recommended Principles to Establish a Co-Operative Partnership Between Museums and First Nations.
2. The Federal government will establish policy which will promote the establishment and support of First Nations museums and cultural centres.
3. The Federal government will support, through policy and programs, museums which involve appropriate First Nations in a participatory manner and in decision making.
4. The Federal government will provide and promote professional training to First Nations, their citizens and employees, at various levels according to community needs and in a culturally appropriate manner.
5. The Federal government will establish a monitoring group to document the relationship of First Nations and museums for a five year period, with a view to establishing appropriate legislation which would address the needs, rights and responsibilities of both communities.

ABORIGINAL ARCHAEOLOGICAL SYMPOSIUM STATEMENT

OTTAWA, ONTARIO -PASSED UNANIMOUSLY- FEBRUARY 18, 1991

The Symposium of Aboriginal peoples on archaeological heritage issues held in Ottawa February 17-18, 1991 wishes to affirm the following declaration of principle in reflection of their inherent responsibility for all aspects of their heritage:

That descendants of the First Peoples who now reside on this continent are its original and indigenous populations, and have a holistic vision of the world which is unique to them and have a self-evident jurisdiction in the area of Aboriginal archaeological resources.

**This jurisdiction includes:**

- the inherent right to ownership and definition of Aboriginal archaeological resources, and religious and spiritual objects
- an exclusive right to determine the extent and nature of the protection, treatment and management of Aboriginal burial sites and Aboriginal human remains,
- a pre-eminent role in the protection, treatment and management of sacred sites,
- a pre-emptive role in the area of impact assessment, and the application of licenses and permits in relation to Aboriginal archaeological resources to insure due respect to specific cultural beliefs.

In accordance with this principle, and in response to a government request for reaction to a proposed bill on Canada's archaeological heritage, this symposium asserts the following principles to guide improvement of the bill so as to empower and enable Aboriginal jurisdiction in the field of Aboriginal archaeological resources wherever they may be found in the lands and waters of Canada.

The text of the bill should be revised so that:

1. **The jurisdiction over and ownership of Aboriginal archaeological resources is explicitly recognized.**
2. **A mechanism be established to enable any Aboriginal communities and/or authorities to exercise jurisdiction and negotiate agreements (including resourcing) relating to Aboriginal archaeological resources, their public interpretation, and their reclamation to communities of origin..**
3. **A declaration which requires this act to be interpreted so as to foster the spirit and intent of Aboriginal and Treaty rights.**
4. **Formally recognizes the role of our Aboriginal spiritual elders and leaders.**

In conclusion this symposium is encouraged by the Code of Ethics of the Second World Archaeological Congress in Venezuela, September, 1990, as a minimum basis for the recognition by archaeologists of Indigenous archaeological concerns.



MAINE HISTORIC PRESERVATION COMMISSION  
35 Capitol Street  
Augusta, Maine 04333

Marie G. Shettleworth, Jr.  
Director

Telephone  
207-289-2113

December 13, 1982

Stephen A. Davis  
Department of Anthropology  
Saint Mary's University  
Halifax, Nova Scotia  
CANADA B3H 3C3

Dear Steve:

Art passed your photographs of the Halifax petroglyphs on to me with a request that I respond. So here goes...

The photographs are excellent. Still, I find it difficult to make out the full ramifications of the designs. The large circular motif, for example, appears to have extensions on the upper and lower right (from the viewer's point of view). Perhaps, if you could make a "surface print", following the technique described in the enclosure, a clearer image will result. (If I can get up there, I have the necessary equipment to do the job.) Parts of the other two designs are barely visible and the relationship of the various parts are obscure. I would also want a detailed statement on the nature of the rock and its situation to the surrounding topography and other prehistoric sites. For these reasons, the remarks which follow are necessarily tentative.

General comment:

To judge from the photographs, the glyphs are executed with relatively deep rounded grooves. This contrasts with the better known scratched or incised petroglyphs of Kejimikujik Lake and, by itself, suggests a prehistoric date. Stylistic features are also closer to Machiasport petroglyphs of Maine than to Lake Kejimikujik.

Circular Motif:

The basic motif of opposing triangles joined at apexes appears in "human representations" at Keskimkujik according to Breed's drawings and in petroglyphs near Machiasport, Maine. I have also found the eroded remnants of what may have been quartered circles at Machiasport but nothing combining the two motifs in the manner you found at Halifax. Bruce Bourque remarked that the pattern reminded him of birchbark decoration. A somewhat analogous arrangement of opposing stepped pyramids appears as a design on the top of an oval Penobscot box dating to 1793 A.D. now at the Maine State Museum. I suspect, on the basis of many analogies elsewhere, that the motif, found in many variations beginning with the late Neolithic in Eurasia (ca. 7,000 years ago) and in the Americas from at least 2,500 years ago, implies the "power" of the shaman over the upper and lower cosmos and, in this particular arrangement, over the four quarters of the plane of earth. Drums, particularly tambourines, are an essential component of the shaman's paraphernalia. They are associated with Shamanism throughout Canada and into Siberia where there is a rich tradition of decorated shaman's drums. In the single Penobscot shaman's song that survives to us, the singer uses his drum to rouse the various "powers" of the upper and lower worlds to listen to his song. I would not be surprised to find such a pattern on a tambourine head or in a drawing of the drumhead.

Alternative Explanations:

Earth or sun symbol - usually the sun in Algonkian pictography will have rays or even a face (see Schoolcraft's examples from the Ojibway, published in the 1850's);

round shield decoration - might pass if the petroglyph had been found in Wyoming. Shields were probably in use in the Northeast at the time of European contact (I seem to remember some reference in Champlain's account??), and Gebhard has suggested that a human figure with a rounding found in a portable petroglyph from Rhode Island is a shield figure. However, most, though not all, shield figures have the legs and feet below and head above. If that is the case with the Halifax petroglyph, it is not clear on the photograph. If it is a "shield-figure" the cosmologic implications probably still hold;

plate or dish as for a feast - Schoolcraft has one ideograph identified as such, usually held by an arm and hand. I would expect prehistoric dishes, however, to be oblong not circular.

Designs in the Second Photograph:

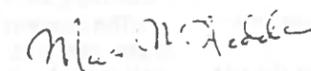
I see a circular head punctated with random dots and marked by 8 (?) rays from the periphery set on a long slightly ovoid body with 7 (?) segments. At least one "ray" seems to have ticking along one side. If so, this would indicate that feather is being represented. The "body" seems to be transected

at the midsection by a long arc which swings down from one of the lower diagonal rays of the head and continues through the body and for some distance on the opposite side. To the viewer's right, the arc seems to be paralleled by another arc initiating a little lower down on the body. The segmented "body" suggests that this figure may represent a "power", possibly the so called "horned worm" or mythical horned snake of the more western Algonkian groups. (Schoolcraft again has several illustrations of horned snakes with segmented bodies.) However, there are other lines adjacent to the figure which I don't understand. I would like to see a rubbing of the whole image and the surrounding surface before trying to elicit further details.

The "waterbug" in the lower half of the photograph is suggestive of a petroglyph with multiple zigzag legs found on a rock in the Stillwater River at Orono during an unusual period of low water (U.M.O. has a rubbing of it in their laboratory) as well as an ideograph identified as a "magic bone" in Schoolcraft's Volume 1, Plate 52 #5. The "magic bone" has a series of wavy lines from each side representing feathers indicative of its "power" and ability to fly through the air. I seem to see 3 digit "hands" at the ends of the wavy (?) appendages on the "waterbug" which may refer to feathers and the power of flight.

That's about as far as I would take it now. I would appreciate more information on the rock and its surrounding topography. The 1977 report you refer to in your letter was a very preliminary sketch. I shall be writing more fully on Maine petroglyphs in the Maine Archaeological Society Bulletin and, I hope, elsewhere in the near future.

Sincerely,



Mark H. Hedden

Enc.

# Bedford discovery may be Indian petroglyphs

By Paul O'Connell  
Sackville Bureau

The discovery of what may be Indian petroglyphs on prime development property has led the town of Bedford to make "very preliminary" moves to protect the property.

Scientists from the Nova Scotia Museum and the Royal Ontario Museum have visited the find, but the petroglyphs have not been authenticated yet, town planning director Barry Zwicker said Friday.

"We suggested to them that if they want to do anything they'd better do it quick," Mr. Zwicker said.

Though there is no immediate pressure to develop the land, he said, the site is privately-owned. To protect the find, the land would have to be purchased from the owner.

Petroglyphs are ancient carvings or drawings on rock. Three measuring about 18 inches were discovered "accidentally" by a local amateur anthropologist recently, he said.

"The question is how many more are there."

He declined to identify the site, but described it as a well-travelled area. To see the drawings, a viewer has to be looking at the right angle, and the light has to be just right.

"I walked over it for six years and didn't even know they were there," he said.

The town is encouraging the museum to contact local historians and put together a proposal for study, so the town can go after any possible funding.

Steve Davis, a professor of anthropology at St. Mary's University, said he has sent the museum a proposal to do a "heritage resource inventory" in the Bedford area.

"We'd go out and look for whatever we can find," he said. "There's a potential for native remains."

Other possibilities exist as well, he said, such as remnants of the former British garrison at Fort Sackville or 18th century residences.

Both Mr. Zwicker and Mr. Davis were reluctant to discuss the finds in Bedford, perhaps because of what happened after a 2,500-year old Indian graveyard was found in White's Lake last summer.

The site was visited by amateur enthusiasts before museum officials could begin their investigation, and as Brian Preston, the museum's curator of archaeology says, the damage done to the site is "something we'll never know."

The site was then covered with brush and logs, until the museum staff could begin their dig.

Similar work in Bedford is only a possibility at this stage.

Mr. Zwicker said he expects more petroglyphs to be found, but added the drawings may be small, moveable rocks, making buying the land unnecessary.

# Heritage groups not interested in carvings

The town of Bedford is having trouble to interest local heritage groups in researching and preserving a group of Micmac rock carvings, or petroglyphs, that may be hundreds of years old.

Town chief planner Barry Zwicker said the response the town received from Bedford Heritage '80 was that the petroglyphs didn't fall within their terms of reference.

The town cannot get any response at all from its own heritage advisory committee. Previous requests to survey the town's architecture to find out if any buildings are potential heritage buildings have also failed to elicit a response from the committee.

Bedford Heritage '80 is a large group of volunteer Bedford residents working to provide a photographic and documentary record of the town's history. The heritage advisory committee is a creation of town council.

Though a proposal to study the petroglyphs and survey the Bedford area to see if any more exist has been submitted by the Anthropology department at St. Mary's University, Mr. Zwicker said he would like to see some local participation in the effort.

Mayor Keith Roberts says Heritage '80 is a private club, and he is hesitant about trying to give them any direction.

But he said he will ask the club if they are interested in serving on the committee.

"Whether they want to get involved in architecture would be a decision they'd have to make," he said.

He said the petroglyphs should be studied before they are buried by a subdivision development, but local participation wouldn't be absolutely essential.

He said if they were proved to be authentic, the town would be interested in preserving them.

# Preservation of engravings studied by heritage group

By Clare Mellor  
SACKVILLE BUREAU

Bedford's Heritage Advisory Committee wants to preserve what may be four Micmac rock engravings found a year ago at an undisclosed location in Bedford, says the committee chairman Anthony Edwards.

Although they have yet to be authenticated, Heritage Advisory Committee members believe the engravings are real.

"As far as we're concerned they are real," he said.

The committee is currently dealing with the complex problem of what should be done about the engravings.

"We've discussed it at our meetings. It's hard to know what should be done. Do you fence the area off or cover it in plastic and charge admission fee or do you just leave alone?" Mr. Edwards asked.

The Heritage Advisory Committee has not actively planned a strategy for preservation of the engravings, but Mr. Edwards said the issue would be discussed at future Heritage Advisory Committee meetings.

Many questions remain about the age and origin of the drawings and they have yet to be authenticated by an expert. Nova Scotia museum officials, however, believe the engravings are real.

Me

# Barrens committee head resigns

By Steve Proctor  
SACKVILLE BUREAU

The chairman of the group working to protect historic Micmac carvings located on the Bedford Barrens resigned Tuesday night after a disagreement over the most appropriate company to carry out an intensive study of the property.

Coun. Len Goucher stormed from a council meeting after Bedford council failed to back the committee's request to have the 90-acre area studied by a firm headed by St. Mary's University archeologist Steve Davis.

Mr. Goucher said the committee has been undermined on several occasions and he was "not prepared put up with the crap any longer."

The proposal by professor

Davis to examine the historical, cultural and geographical importance of the Barrens was one of three submitted to the committee.

Mr. Goucher had sought approval for a two-month, \$9,000 study of the site, but council voted to defer any decision until they had a chance to study the other proposals which would take less time and money.

A report completed this past summer by researcher Brian Molyneaux says the Barrens is one of only a few sites in eastern Canada where petroglyphs, or rock carvings, are found.

Coun. Grant Walker said time is of the essence because its findings will determine how the town deals with the area in its municipal planning strategy discussions.

He supported a proposal by the consulting firm of Porter Dillon for a one month study costing \$3,000 less than the Davis proposal.

"It's not my fault (the committee) hasn't built in a time line that coincides with the municipal planning strategy," he said.

Earlier in the meeting Mr. Goucher objected to a motion calling for council to revoke its support for an earlier decision which would protect the 90-acre site by rezoning it from residential to commercial.

The committee has also been criticized recently for failing to have the native perspective represented on the committee.

"The Barrens are too important to make a mistake with. We're only going to get a chance to do this once," said Coun. Goucher.

# Barrens protection plan said too costly

By Steve Proctor  
SACKVILLE BUREAU

Bedford council's decision to rezone 90 acres of prime residential property to protect historic Micmac carvings has come under fire by the town's recreation committee.

Committee members said this week the rock carvings, or petroglyphs, should be protected. But they were concerned that designating the entire 90 acres as park land might drain the budget for acquiring and developing parks in future.

Recreation director Bob Naus said Wednesday if money to buy the land or compensate landowners, who would not be able to develop their property, was taken from recreation sources, the conse-

**'A change would put the Barrens at peril. We want to protect the site until we know exactly what we have there.'**

quences could be severe. The park land reserve fund could be depleted for several years to come.

To underscore the committee's concern, Coun. Grant Walker has asked that council's motion be rescinded.

If the motion is not rescinded and the zoning change receives ministerial approval, the town would be forced to pay Barrens property owners 10 per cent of the land's assessed value for three years for freezing development. Planning department figures indicate that would total \$90,000 a

— protection committee chairman year.

Within three years, the town would have to arrange to buy the property, worth \$2.5 million to \$3.1 million, or rezone it to allow some type of development.

Town council will vote on the motion to rescind its decision next week, but members of the group that has pushed for the rezoning to protect the centuries-old carvings are outraged at the recreation committee's action.

"Why are they trying to undo everything we've worked for?" asked committee member Shirley

Jerram. "We've been given a mandate — they should let us do our job."

"A change would put the Barrens at peril. We want to protect the site until we know exactly what we have there," said chairman Len Goucher.

The committee has recently approved the terms of reference for a new \$9,350 evaluation of the historical, archeological, and cultural significance of the site. The proposal was submitted by a consulting group headed by archeologist Steve Davis, a professor at Saint Mary's university.

The evaluation could begin as early as the end of the month if council gives the plan financial approval next week.

## Temperers ignited over Bedford Barrens study

By Andrea Nemetz  
SACKVILLE BUREAU

Temperers flared Tuesday night during Bedford town council's discussion of a contract to study the Bedford Barrens, site of historic Micmac carvings.

The two-month, \$9,000 study has been awarded to a group including St. Mary's University archeologist Steve Davis.

Coun. Grant Walker said he was concerned terms of reference for study of the 90-acre site were not specific enough and argued, unsuccessfully, amendments should be made.

Petroglyphs advisory committee chairman Coun. Len Goucher argued the terms of reference had been discussed with and approved by senior town planner Steve Moir.

But Bedford's planning director Barry Zwicker supported Coun. Walker, saying he felt the terms of reference were unclear.

"And if they are unclear to me, they may not have been clear to the consultants."

Mr. Zwicker suggested some of the details could be made clearer when a contract was signed.

The majority of the five-member

quorum agreed with Coun. Peggy Draper that amendments would require going back to consultants and time was of the essence.

A decision about whether it is necessary to preserve the entire 90-acre site in order to understand the context of the petroglyphs must be made prior to finalizing the town's Municipal Planning Strategy.

Deputy mayor Don Hunnington argued the committee had failed to provide a work program, schedule, list of resources needed and a budget.

"Expediency doesn't override the terms of reference laid down by council."

"We're working to the best of our ability within the time frame set down by council," said Coun. Goucher who agreed to try to provide the work program and list of resources by council's March meeting.

The petroglyphs advisory committee intends to meet with the Bedford Board of Trade to clarify the issue and to call a public information session sometime before public hearings for the new town planning strategy, he said.

Mail Star 30/01/91

# Natural history of Barrens unexceptional, biologist reports

By Andrea Nemetz  
SACKVILLE BUREAU

A biologist studying the Bedford Barrens says a preliminary survey indicates there is nothing particularly notable about the natural history of the area.

"Until we analyze the vegetation, we won't know about the recreational and educational opportunities of the site, but based upon our preliminary findings they do not appear to be outstanding," said Art Lynds of Interpretation Resources.

The group was hired by the town to prepare an evaluation of the historical, archeological and cultural significance of the site.

Mr. Lynds said there are better educational opportunities at a place like Admiral's Cove due to a greater diversity of plant species, more forest types, varying land-forms and a coastal zone where water meets land.

The Barrens, an 80-acre plot of land containing rare Micmac carvings, is made up of three forest types, Mr. Lynds told a Bedford Recreation Advisory Committee meeting this week.

Much of the area is covered by a red maple, red oak and birch forest, the forest type covering more than half the province. It is rela-

tively drought-resistant and can regenerate quickly after logging or forest fires.

The area's most unique feature is the whalebacks, ridges of exposed bedrock which look like a whale's hump and are covered with mosses and lichens.

Mr. Lynds said standing near the whalebacks provides a sensation of being in the wilderness, but he doesn't recommend developing hiking trails along the rocks.

"I'd be leery of putting hiking trails in because some have very steep slopes and are very slippery when wet. People don't stay on the paths and the plants growing there are very sensitive to disturbances. With intensive use the site would be degraded."

While there have been suggestions the entire 80 acres be preserved as a semi-wilderness park, Mr. Lynds said the area is more conducive to local parks.

He said he could not make any comments about the rock carvings known as petroglyphs because he is concerned only with the area's natural history.

# Metro

## Bury Barrens petroglyphs—expert

By Andrea Nemetz  
SACKVILLE BUREAU

Replicas should be made of the Micmac rock carvings on the Bedford Barrens and the originals buried, says an expert hired by the town to study the cultural and historical significance of the area.

There is no way to protect the petroglyphs from vandalism or the ravages of nature, Steve Davis told the Bedford petroglyphs advisory committee Wednesday when he presented his interim report.

"Certain natural elements like lichens are currently affecting the glyphs," the Saint Mary's Univer-

sity archeology professor said. "But the number one problem with petroglyph sites in Canada is moisture. If there is a weakness in the rock the glyph is on, and moisture gets in, it can freeze and the rock break."

He is sure the petroglyphs will be vandalized. Warning signs and rugged steel fences topped with barbed wire have not proved to be effective protection at other sites.

"The petroglyphs won't last forever no matter what we do and the replicas are an excellent way to preserve them," said committee member Charles Lindsay, who is

also chief of archeology with the national parks service in Halifax.

A casting technique involving vulcanized rubber molds creates exact replicas, he said.

A team of conservationists will cast hundreds of petroglyphs in Kejimikujik Park this summer, Mr. Davis said.

The conservationists have indicated they will cast the Barrens petroglyphs at no extra charge and consult in reproducing replicas.

Mr. Davis suggests a replica could be placed near the site of the originals to help people understand the significance of the carvings.

# In the Bedford of 2020, it's housing over history

Chronicle - Herald A (Bedford) 28/01/91

Hard to believe, but in a little over 30 years the town will walk along the subdivision road where the Bedford that is now gone has been.

As you look at and over the town, you can see the family homes that were built in the 1950s and 1960s. In the future, when the town is a mix of old and new, it will be a mix of old and new.

It is the only one of its kind in Canada. It is the only one of its kind in Canada. It is the only one of its kind in Canada.

## BEDFORD-SACKVILLE DATELINE

Steve Proctor

Passing from the Tuban team into the Bedford petroglyph display. The exhibits are attractive and professional and the accompanying explanation is informative.

On the wall across from the two square metre replica of the carvings is a painting of the Bedford Group of Seven artist Arthur Lismer. Inspired by the scenery, he painted "Bedford Hills" from what is now the proposed site of a museum.

The majority of visitors aren't interested in the archival material in the basement. But with special permission increased interest can be seen through volumes of reports and council agendas to determine how, perhaps inevitably, the Bedford became developed and the 400-year-old drawings were buried.

There are too many documents, and time is too short to look at everything, so we'll just look at a few.

We have to skip the technical documents detailing how the last great local artist died and the museum that over there on the left is the main attraction on the main floor.

It was the only one of its kind in Canada. It is the only one of its kind in Canada. It is the only one of its kind in Canada.

As a judge of the drawings documenting the next seven years indicates, the report generated for the Bedford community interest. Two groups formed during this time, one private to protect the drawings and one quasi-governmental to protect the drawings.

The first formal study of the petroglyphs was carried out by researcher Brian Montague. His 35-page report, kept now in the centre safe, was termed disappointing. It authenticated the petroglyphs, but failed to provide an exact age for the drawings.

Next to the study are the minutes from dozens of petroglyph advisory committee and town council meetings. An analysis tells of backing and fighting between committees, uncertainty over the value of preserving history versus the value of prime residential property, and recurrent "some political opportunism."

Grouped along with several technical documents explaining the personal zoning guidelines for the Barrens, and the costs associated with tying up the privately-owned lands, is an interim recommendation from a 1991 study of the Barrens.

At a meeting in March of that year, an archaeologist

expert says there were petroglyphs on the left bank and the original town.

Although initially greeted with some scepticism, the idea gained momentum as people realized the carvings could not be protected from vandals in nature and natural elements such as birds burrowing them. Bedfordians were voting the petroglyphs for future generations to enjoy, and better preservation methods developed.

After the buying decision was made, a deal was struck for months about how much land to be all encompassed around the drawings. Bedford voters, arguing for the retention of a large parcel of the property, tried to make the land in town in the 1991 municipal election. Election results showed they were unsuccessful.

Responding to a spring 1992 petition on the glyphs that brought home their vulnerability in a report which said Admiral's Cove would make a more suitable wilderness refuge. The council of the day voted to preserve 10 per cent of the Barrens land and approved the remainder for development. Bedford has prospered in the last 30 years, and the Barrens land available for residential development, town life has been vibrant and tax revenues remained stable.

There is still some lingering uncertainty over the way the petroglyph issue was handled, but a poster in the centre's foyer attests, most people are looking on new proposals to unbury the petroglyphs and make them the central focus of a live site heritage park.

# Town still undecided about Micmac site

By Andrea Nemetz  
SACKVILLE BUREAU

The final decision on how much land is required to protect the Micmac rock carvings on the Bedford Barrens rests with the town, says an expert who has just completed an interim report on the rare petroglyphs.

Town council has been grappling with the issue of whether to protect the whole 90 acres of the privately-owned prime residential property located between the Bedford Highway and the Bicentennial Highway.

The area around the two carvings is considered by Micmacs to be a sacred place, says Steve Davis, an archaeology professor at Saint Mary's University. He was hired by the town to study the cultural and historical significance of the area.

"But their idea of a sacred place is not like our notion of a cathedral where large numbers go to worship. It may be a place of spiritual significance for one individual.

"What constitutes a sacred place is what is in the mind of the individual who did the carvings. I can't define it."

Under the province's Special Places Act, only the one-by-two-metre area actually containing the carvings is protected. Adjacent areas are not.

Nova Scotia Museum officials didn't give Mr. Davis a direct an-

swer about how much land would be required to protect the petroglyphs, although they agreed there should be a buffer zone.

Mr. Davis said he also consulted with natives, who have told him they would be content with five per cent of the land that makes up the 90-acre area known as the Barrens, set aside as a buffer zone.

Representatives from the Micmac community could not be reached for comment.

"A greater area is not necessarily better for interpretation," Mr. Davis told a meeting of the Petroglyphs Advisory Committee earlier this week.

And if the petroglyphs were in the middle, it might make a difference but they are tucked in the south-east corner of the Barrens where development has already encroached on the sanctity of the special place.

Preliminary findings of biologist Art Lynds concluded the natural history of the area is not particularly unique.

While rock formations known as whale-backs are interesting, Mr. Lynds said he could not recommend they be developed as hiking trails because they are very slippery and the plant species surrounding them are sensitive.

The report and recommendations of the consultants will be discussed April 3 at a public meeting.

Mail Star 3 April 91  
Bz

# Barrens petroglyphs subject of meeting

A decision on how much land is required to protect the historic Micmac carvings on the Bedford Barrens will likely be a political decision, says the chairman of the Petroglyphs Advisory Committee.

"When the final report comes down from the consultants it won't be specific, but will focus more on the glyphs themselves. This will be a decision the town will have to make," said Coun. Len Goucher, after a meeting of the petroglyphs committee to review the interim report submitted by archaeologist Steve Davis.

Anyone concerned about the future of the Barrens should come to the public information meeting at 7:30 p.m. tonight at the Bedford Fire Hall, says Coun. Peggy Draper, who also heads up the town's Recreation Advisory Committee.

"There are people who have expressed concerns about the cost involved in protecting the Barrens from development and there are some who want to see all the land left alone. Town council needs as much public input as possible before making their decision."

The Mail-Star 23/03/91 D22

# Petroglyph policy slammed

## Micmacs want more input on fate of carvings

By Steve Proctor  
SACKVILLE BUREAU

Nova Scotia Micmac leaders lashed out at members of the Bedford petroglyph advisory committee Wednesday night for failing to involve more native people in determining the fate of Micmac carvings located in the 90-acre area of the town known as the Barrens.

Noel Knockwood of the Micmac Friendship Centre told more than 120 people attending an information session on the preservation of the rock carvings that Micmacs have not had the pre-eminent role they deserve in the protection and management of sacred sites like the Barrens.

"As descendants of the original peoples we have self-evident jurisdiction in the area of aboriginal

archaeological resources," he said, while urging any development in the area be put on hold until greater study of the area can be carried out.

But town council may not be willing to wait. The group set up to advise the town on how to protect the two authenticated drawings on the Barrens is expected to make a final recommendation to council by May to ensure any required zoning changes can be incorporated into the long overdue review of the town's municipal planning strategy.

The need for haste has not impressed Chief Leonard Paul, chairman of the Micmac Association of Cultural Studies. In a letter read at the meeting, he said the committee had abrogated its responsibility to consult with the Micmac nation.

It also attacked an interim report by the most recent group studying the area as "demeaning, simplistic and lacking in appreciation of traditional beliefs."

One facet of the interim report suggested exact duplicates of the carvings should be made and then the originals should be covered over to protect them from vandalism.

Cathy Martin, a Micmac who has served on several task forces looking at native heritage, said the committee offended chiefs across Nova Scotia when Micmac committee member Alex Christmas was dropped from the committee in December because it was unwilling to pay the costs associated with his trips from Sydney to meet with the committee.

## Bedford council defers Barrens zoning decision

By Andrea Nemetz  
SACKVILLE BUREAU

Both Bedford residents and town councillors need more information on what designating the Bedford Barrens as parkland would mean to the town, Coun. Peggy Draper said Tuesday.

Bedford Town Council agreed and passed a motion to defer a zoning decision on the 90-acre parcel of land containing authenticated Micmac petroglyphs until after public information meetings.

Tentatively scheduled for mid-March, the meetings will be held prior to public hearings about the town's proposed municipal planning strategy, soon to be forwarded to the Department of Municipal Affairs.

A decision on protecting all or part of the land surrounding the rare carvings has been a contentious issue in previous discussions about the plan for development in Bedford.

In November, council decided to designate the privately owned land as parkland open space, freezing development on the prime residential property and sparking considerable controversy.

recreation advisory committee suggested that designating the entire 90 acres as parkland might drain Bedford's budget for acquiring and developing future parks. That prompted Coun. Grant Walker to ask council to rescind the motion designating the Barrens as parkland.

If the motion is not rescinded the town would be forced to pay property owners 10 per cent of the land's assessed value for three years. Cost is estimated by planning staff to be about \$90,000 annually.

"Previously I supported the POS designation but since then I have had concerns," said Coun. Draper in proposing the motion. "I'm concerned about the \$90,000 rent fee and the possible halt on development of other parkland. We also need information on how much of the land needs to be protected for the integrity of the petroglyphs."

Coun. Draper also said taxpayers need to know if a decision is made to acquire the Barrens what kind of funding — provincial, federal, corporate and private — would be available as the cost of purchasing the Barrens

D12 THE MAIL-STAR Wednesday, February 6, 1991

## Barrens land rezoned to allow development

By KIM MOAR  
The Daily News

Bedford town council last night rescinded a motion designating the Barrens property parkland and voted to zone the area for residential development.

Planning staff said the residential comprehensive development district zoning would offer the property where Micmac rock carvings have been found adequate protection because no development could proceed without a development agreement.

Planning director Barry Zwicker said the designation would highlight the importance of the petroglyphs in any development plan.

Zwicker said the designation will allow enough time for the town's petroglyph advisory committee to finish its nearly com-

plete study of the site because a development agreement would take between six and eight months to be approved.

Councillor Len Goucher, chairman of the petroglyph advisory committee, said council had made "one giant mistake. You should have given us the four weeks to complete the study."

Goucher's moved for the matter to be deferred until after the study, but that was defeated.

Coun. Peggy Draper, who made the successful motion, said the change would not affect the committee's work.

Draper said she supported the new zoning because it protected the petroglyphs at no cost to the taxpayers.

If the parkland designation had remained, the town would have had to pay landowners \$90,000 yearly for freezing land development.

# Barrens to be protected despite rezoning decision

A decision to drop the parkland designation and zone the Bedford Barrens for residential development will not get in the way of protecting the Micmac carvings there, says Bedford councillor Peggy Draper.

After several months of discussion, councillors decided Monday night to go with zoning which would require a development agreement with the town prior to any construction, thus ensuring the petroglyphs would be protected.

Zoning the 90-acre site as parkland was too expensive a way of protecting the property, council decided.

Under the parkland designation, the town would have been obligated to pay landowners \$90,000, 10 per cent of the assessed value of the property, for up to three years as a holding fee.

With a RCDD designation

(residential comprehensive development district) I'm confident the property is well protected and we won't have to pay the landowners any compensation. I'd much rather use the money that would have been the holding fee for parkland acquisition," Coun. Draper said Tuesday.

The town's planning staff agrees that a contract residential designation is the most appropriate for the 90-acre property, said Director of Planning Barry Zwicker.

He outlined the reasons in a memo to council.

Besides eliminating the need to compensate landowners as required with a parkland designation, a contract residential designation would provide opportunities for council to negotiate with land owners to purchase land or acquire land through parkland dedication and/or conditions in the develop-

ment agreement in order to protect the petroglyphs.

And requirements for public participation built into the development process in a contract residential area would give council sufficient time to receive and act upon the recommendations of the petroglyphs advisory committee.

Council still supports the protection of the petroglyphs and a portion of the Barrens, but will wait for a recommendation from the petroglyphs advisory committee before making a decision on the amount of land to be retained for the protection of the rare carvings, Coun. Draper said.

Len Goucher, chairman of the group trying to protect the drawings, was disappointed council was unwilling to delay the decision until the report was completed.



APPENDIX B

## Interpretation Resources

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THE SIGNIFICANCE OF THE NATURAL AND  
CULTURAL HISTORIES OF THE BEDFORD BARRENS:  
POSSIBLE APPROPRIATE USAGE OF THE AREA

DOCUMENT 2

BIOPHYSICAL AND RECREATIONAL INVESTIGATION OF THE BEDFORD BARRENS

STUDY AREA

The Bedford Barrens are located in the northwest corner of the Town of Bedford, sandwiched between the Bedford Highway, the Bicentennial Highway, and several residential subdivisions.

The Barrens are situated in Theme Region 413(a) - Atlantic Interior theme region (400), Quartzite Plains district (410), and the Halifax Quartzite Barrens unit (413(a)) (Simmons et al. 1984).

The theme region, as a whole, is characterized by a slightly elevated planed surface of older hard bedrock - quartzite, greywacke, and granite - gently tilting in a southeasterly direction.

Many of the province's lakes have been created on this planed surface by glacial action. Vegetation varies from tolerant hardwoods confined to the higher ridges to a spruce, hemlock, pine forest covering much of the undulating to flat topography. Heath barrens heath-pioneer tree species semi-barrens are fairly extensive throughout the region.

The smallest division of this theme region, the Halifax

2. Quartzite Barrens unit, encompasses a "ridge-swamp-swale" landscape. The topography is dominated by dry, boulder-strewn quartzite ridges, usually barrens or semi-barrens with intervening, poorly-drained swamps and swales. The area has many parallel fault-like ridges, thus creating linear valleys which are filled with rivers or small streams, small lakes or ponds, or quite often with swamps, fens, or bogs. The Bedford Barrens provides an excellent example of this type of landscape.

The soils associated with this area are predominantly Halifax soils - well-drained, stony, sandy loams derived principally from quartzite. Its poorly-drained associate, the Danesville soil, occurs between the ridges in low-lying areas, in many cases occurring as poorly-drained swamps.

The forest tree species which characterize this land unit consists of beech, yellow birch, white birch, red oak, red maple, and, less frequently, sugar maple on higher, well-drained ridges. Mixed stands of spruce, hemlock, white pine, red maple, balsam fir, and yellow birch dominate flat to moderately sloping topography, especially in areas with shallow soils and bedrock outcroppings. Black spruce, balsam fir, red maple, and larch dominate depressional areas and swamps. Extensive areas of fire barrens and semi-barrens, covered by a thick carpet of ericaceous shrubbery and/or lichens, is sparsely treed by white and grey birch, poplars

3. red oak, beech, and red maple with a minor component of relic spruce, hemlock, and white pine in the upper canopy.

#### METHODOLOGY

The methodology employed in the natural history and recreational sections of this study of the Bedford Barrens is as follows:

- A. Assemblage and review of current information with respect to the study area.
- B. Preliminary delineation of vegetation units from 1982 colour aerial photographs at a scale of 1:10,000.
- C. Field reconnaissance to verify interpreted information and to investigate recreational opportunities.
- D. Final delineation of vegetation types using verified information from ground-truthing.
- E. Analysis and synthesis of vegetation types into hierarchical classification system of forest species associations and habitats.
- F. Development of a recreational plan.
- G. Map production.
- H. Final documentation.

VEGETATION INVENTORY

A. CLIMAX VEGETATION OF EASTERN NORTH AMERICA

According to Nichols (1935) and Braun (1950), Nova Scotia is within the "Hemlock-White Pine-Northern Hardwoods region" vegetational zone. This vast region extends from eastern and southern United States to eastern and southern Canada. However, the actual boundaries of the region are ill-defined as there are many scattered outliers. The region is characterized by climax (the end result of natural vegetation succession in which, under the prevalent climatic conditions, no further changes in plant species composition occur) mixtures of deciduous, coniferous, and mixedwood forest communities.

The climax deciduous forest communities are composed of sugar maple and beech, with yellow birch, white elm, red oak, and red maple as associates. Pioneer or early successional deciduous communities are dominated by the aspens, and white and grey birch. These deciduous communities are usually associated with well-drained upland areas.

The climax coniferous forest community of this forest region may be divided into four general types which relate predominantly to the soil regimes of the region: (1) white, red, and jack pine dominate the drier sandy plains and ridges; (2) black spruce, northern white cedar, and larch

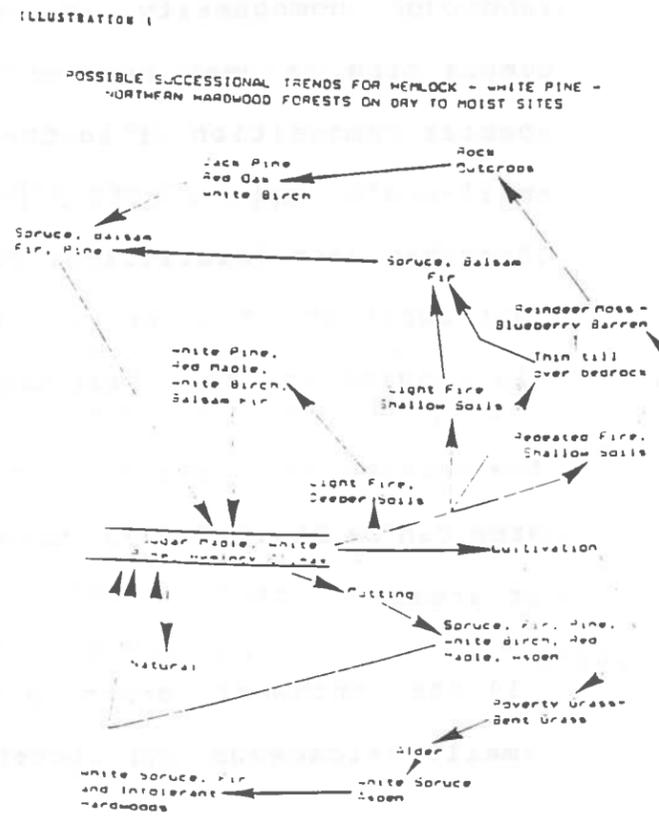
4.

5.

(tamarack, hackmatack, or juniper) invade the poorly drained areas, swamps, and bogs; (3) red and white spruce, eastern hemlock, and balsam fir dominate mesic (moist) flats and slopes.

Braun (1950) states that "this region is not merely a broad transition between the deciduous forest of the South and the northern conifer forest...as certain authors suggest. It has the characteristics which define it as a distinct region." (Braun (1950) p. 339). Nichols drew the same conclusions.

Illustration 1 depicts a possible generalized successional scheme for the Hemlock-White Pine-Northern Hardwoods forest.



6. 7.

B. PRESENT VEGETATION COVER OF THE BEDFORD BARRENS

The vegetation of the Bedford Barrens study area is one of homogeneity. Due to the widespread fire disturbance along the western side of Bedford Basin - Halifax Harbour which encompasses the entire study area, the vegetation is very uniform and mundane.

Only at the extremes of the soil moisture regime and in areas which have been spared from the destructiveness of the fire do we find forest stands sufficiently differentiated from each other in the overall landscape that will permit us adequately map these stands at a usable scale and within a reasonable time frame and on budget. Within the overall fire landscape homogeneity is very prevalent, with species composition of one area very subtly intertwining with the species composition of another area, thereby making small-scale mapping difficult. In this study area as well, there has been insufficient human disturbance since the last conflagration to alter or create distinctive forest stands via logging or other land-use activities.

The present-day vegetation cover of the Bedford Barrens study area can be divided into three more-or-less distinctive units or areas:

(1) the northwest corner in which there is a mixture of small, ericaceous and lichen vegetation-dominated barrens,

poorly drained black spruce swamps, and moderately well drained black spruce forests with a minor component of other tree species. This forested and non-forested area occupies the classic ridge-and-swale topography of quartzite country. The ridges of this landscape are termed "whalebacks" and form the "Barrens" - not necessarily a unique feature in a regional context but certainly an interesting feature from a geological and vegetation perspective,

(2) the central and northeast areas where there is a mosaic of shade intolerant, fire-dependent tree species resulting in a very homogeneous hardwood forest. In this area the bedrock ridges are not as pronounced and there generally seems to be a thicker mantle of soil throughout. After the fire went through the area, these hardwood species - red maple, red oak, white and grey birch, and to some extent the shade-tolerant beech - were able to recolonize the area due to their superior ability to root-sucker.

(3) the southeast corner of the study area is a mixedwood forest with unmappable pockets of pure softwood and hardwood groves. This mixed forest is dominated by red spruce, eastern hemlock, white pine, balsam fir, red maple, red oak, and white birch. Parts of this forest, if left to mature, would develop into the regional climax old-growth forest within a hundred years.

3.  
 Following is a detailed inventory of the vegetation units found in the Bedford Barrens study area.

**VEGETATION UNITS OF  
 BEDFORD BARRENS**

- |  |  |
|--|--|
| <p>8 1 1<br/>         1. bS La rM . 1 . 5<br/>         -----<br/>         Os, Hm, Ss . 2A . E</p> <p>8 1 1<br/>         2. bS La rM . 2 . 3<br/>         -----<br/>         Os, Hm . 3A . E</p> <p>9 1<br/>         3. bS La . 1 . 5<br/>         -----<br/>         Ss . 2A . E</p> <p>7 1 1 1<br/>         4. bS La bF rM . 1-3 . 4<br/>         -----<br/>         Os, Hm, Ss . 2A-3A . E</p> <p>9 1<br/>         5. bS La . 1 . 3<br/>         -----<br/>         Os, Ss . 2A . E</p> <p>3 3 2 1 1<br/>         6. wB rM rO Be bS . 1-2 . 4<br/>         -----<br/>         Ww . 3 . M</p> <p>3 3 3 1<br/>         7. rO rM wB bS . 3 . 4<br/>         -----<br/>         Ww . 3 . M</p> <p>3 2 2 1 1 1<br/>         8. rS wS bF wP rM rO . 3 . 4<br/>         -----<br/>         Hm . 3 . M</p> | <p>3 3 2 1 1<br/>         9. rS eH wP rO rM . 3 . 4<br/>         -----<br/>         Hm . 3 . NC</p> <p>10 - 36 Small Barrens</p> |
|--|--|

**Vegetation Inventory Legend**

(Based on 1981 Colour 1:10,000 Photos)

Example:  $\begin{matrix} 5 & 5 \\ \text{bS} & \text{bF} \end{matrix} . \begin{matrix} 3 & 4 \\ \text{Hm} \end{matrix} . \begin{matrix} 3 & \text{E} \end{matrix}$  % Species Comp. . Height . Density  
 -----  
 Plant Assoc. . Stand Cond. . Successional Status

**Species Composition**  
 -----

- |                      |                     |
|----------------------|---------------------|
| bS - Black Spruce    | rM - Red Maple      |
| rS - Red Spruce      | rO - Red Oak        |
| wP - White Pine      | wB - White Birch    |
| eH - Eastern Hemlock | Be - American Beech |
| bF - Balsam Fir      |                     |
| La - Larch           |                     |

**Height Classes**  
 -----

- |   |           |
|---|-----------|
| 1 | 1-20 Feet |
| 2 | 21-40     |
| 3 | 41-60     |
| 4 | 61-80     |
| 5 | 81-100    |
| 6 | 100+      |
| 7 | Uneven    |

**Density Classes**  
 -----

- |   |                |
|---|----------------|
| 1 | 0-25%          |
| 2 | 26-50          |
| 3 | 51-75          |
| 4 | 76-100         |
| 5 | Uneven; Patchy |

**Ground Plant Associations**  
 -----

- |    |                       |
|----|-----------------------|
| Hm | Humus-Moss            |
| Os | Cinnamon Fern         |
| Ss | Sedge-Sphagnum Moss   |
| Ww | Wood Fern-Wood Sorrel |

**Successional Status**  
 -----

- |    |                    |
|----|--------------------|
| E  | Early Successional |
| M  | Midsuccessional    |
| NC | Near-climax        |
| C  | Climatic Climax    |



FOREST SPECIES ASSOCIATIONS

The more common forest species associations in Nova Scotia and their relative importance in terms of area occupied within the province were generated by the Nova Scotia Department of Lands and Forests, using the provincial forest inventory permanent sample plots (Bailey and Wellings, 1980). Species considered were only those which constituted at least 20% of the basal area and no more than three species per association. The forest species association scheme is useful in understanding successional trends for the various regions of the province. Grouping vegetation units or types into forest species associations provides a basis for comparing the distribution and representation of vegetation within the park area to that which occurs through out the province. The forest species association is also the connecting link between the detailed vegetation unit and the more generalized forest habitat classification.

Table 1 is a listing of the forest species associations found in the Bedford Barrens study area.

Table 1 Forest Species Associations

Forest Species Association	Veg. Unit No.	South-central (Hal.-Hants) Forest Inventory		Provincial Distribution	
		%	A. R.	%	A.R.
1. Spruce	1,2,3,4,5	20.3	A	13.4	A
81. Red Maple, White Birch, Red Oak	6,7	-	R	0.1	U
86. Spruce, Eastern Hemlock, White Pine	9	-	R	0.1	U
89. White Spruce, Spruce, Balsam Fir	8	-	R	0.1	U

Abundance Rating (A.R.)

- Abundant (A) - can expect to encounter forest species association throughout the province in a variety of environmental situations.
- Common (C) - can expect to encounter forest species association within somewhat restricted or characteristic environmental situations.
- Uncommon (U) - within characteristic environmental situation, the forest species association may or may not be encountered. Needs protection.
- Rare, Unique (R) - forest species association seldom encountered in the province. Most definitely needs protection.

D. GROUND PLANT ASSOCIATIONS

A plant association is a community of species that usually are found growing in association with each other. In certain situations the species may be wholly or partially dependent on one another; in other circumstances the species may tend to congregate together in response to microenvironmental factors (local vertical and horizontal differences). Plant associations are generally named after a dominant, regular occurring species (eg. Bracken fern association found in post-fire forests and barrens in which the bracken fern is always present and usually the dominant group species. Descriptions for plant associations require intensive field sampling. Due to the inappropriate timing of this study (late winter-early spring when important ground species are absent) a combination of field sampling and intensive literature review of other park areas in the same physiographic setting (Mainland North, Hemlock Ravine, and Admiral Cove) was undertaken to establish plant associations for the Bedford Barrens study area.

In most cases, a particular plant association is confined or is typical of a certain habitat or tree species group. The following two tables illustrates plant association-habitat/tree species group interrelationships and characteristic species of dominant forested plant associations respectively.

Table 1

GROUND PLANT ASSOCIATIONS - TYPICAL HABITATS

<u>Plant Association</u>	<u>Major Species</u>	<u>Typical Habitat</u>
Wood Fern - Wood Sorrel	<u>Dryopteris spinulosa</u> <u>Oxalis montana</u> <u>Pleurozium schreberi</u>	1. Spruce, Fir-Maple 2. White Spruce, Fir-Maple, Birch (Coastal) 3. Mixed-wood stands with conifer species predominant
Humus-Moss	<u>Pleurozium schreberi</u> <u>Dicranum spp.</u> <u>Bazzania trilobata</u>	1. White Spruce 2. Spruce, Fir 3. Balsam Fir 4. Black Spruce, Larch
Cinnamon Fern	<u>Pleurozium schreberi</u> <u>Cornus canadensis</u> <u>Osmunda cinnamomea</u>	1. Spruce, Fir-Maple 2. White Spruce, Fir 3. Maple, Birch-coastal 4. Black Spruce, Larch 5. Mixed-wood stands with conifer species predominant
Bracken Fern - Lamkill	<u>Pteridium aquilinum</u> <u>Kalmia angustifolia</u> <u>Cornus canadensis</u> <u>Vaccinium angustifolium</u>	1. Spruce, Fir 2. Spruce, Fir, Pine 3. Spruce, Fir, Pine, Maple, Birch 4. Barrens

Table 2

Species List for Major Ground Plant Associations (Forested)

Humus-Moss (Hm)	<u>Dicranum spp.</u> - Broom Moss <u>Pleurozium schreberi</u> - Shreber's moss <u>Hylocomium splendens</u> - Stair step moss <u>Bazzania trilobata</u> - Liverwort <u>Cladonia spp.</u> - Lichen
Cinnamon Fern (Os)	<u>Osmunda cinnamomea</u> - Cinnamon Fern <u>Maianthemum canadense</u> - Wild Lily of the Valley <u>Aralia nudicaulis</u> - Wild sarsaparilla <u>Clintonia borealis</u> - Snakeberry <u>Coptis trifolia</u> - Goldthread <u>Cornus canadensis</u> - Bunchberry <u>Sphagnum spp.</u> - Sphagnum Moss
Wood Fern - Wood Sorrel (Ww)	<u>Dryopteris spinulosa</u> - Wood Fern <u>Dryopteris noveboracensis</u> - New York Fern <u>Dennstaedtia punctilobula</u> - Hay-scented Fern <u>Dicranum spp.</u> - Broom Moss <u>Pleurozium schreberi</u> - Schreber's Moss <u>Maianthemum canadense</u> - Wild Lily of the Valley <u>Trientalis borealis</u> - Twinflower <u>Oxalis montana</u> - Wood Sorrel <u>Aralia nudicaulis</u> - Wild Sarsaparilla <u>Clintonia borealis</u> - Snakeberry <u>Coptis trifolia</u> - Goldthread <u>Cornus canadensis</u> - Bunchberry <u>Aster acuminatus</u> - Wood Aster

E. HABITATS

Habitat may be simply defined as the place where an organism lives. A more complete definition of a particular habitat should recognize all of the interacting abiotic (non-living) and biotic factors that influence the life of the organism.

Habitat types will in some cases be dominated by abiotic factors (for example a rocky shore) while in others biotic factors will dominate (for example a maple, oak, birch forest). Between these extremes are those habitats that require definition in terms of both abiotic and biotic factors (for example a salt marsh).

A defined habitat type will normally include a certain degree of variation due to small differences in shade, soil type, drainage, etc., that may occur. A good example of this is seen in the eastern coastal areas of Nova Scotia where an extensive tract of coastal white spruce forest harbours smaller, distinct areas of bogs and barrens. Along the Eastern and Southwestern Shores the parallel ridge and depression structure of the Meguma outcrops results in a sequence of alternating forest, bog, and barren habitat on a scale that might not allow the bog and barren to be clearly distinguished in general habitat mapping. In this way small areas of bog and barren habitat are normally found to occur in areas identified as forest habitat. This example

is certainly applicable to the Bedford Barrens study area, especially with respect to small areas of ponds and barrens.

In addition, within any habitat a diversity of interesting and often clearly defined microhabitats may be found. Examples of microhabitats include the bark of a tree (and often a particular level or side of the tree), a rotting log, or the shaded ground beneath a tree. Each microhabitat will be characterized by small variations in physical, chemical, and/or biological factors.

Following is a listing and description of the forested and non-forested habitats found within the Bedford Barrens study area:

- Non-forested - Barren  
Swamp + Black Spruce, Fir
- Forested - Maple, Oak, Birch  
Spruce, Fir, Pine - Maple, Birch  
Spruce, Hemlock, Pine

**BARREN**

Mapped Vegetation Units: 10 to 36

Total Area: 4.7 ha.

A barren is a rocky heathland covered with dwarf shrubs and lichen vegetation.

Factors or combination of factors which may explain the

development of a barren are: (1) glaciation in which the ice scaping over hard rocks results in a thin layer of coarse, infertile till and boulders being deposited over the area; (2) the effect of repeated and/or severe fire, stripping the soil of its fertile humus layer. Repeated deep burns give rise to the development of lichen dominated barrens, especially where bedrock outcropping occurs; (3) the development of a hardpan layer within the soil solum which is impenetrable to plant roots; and (4) rigourous climatic conditions. The first two factors in the development of a barren have definitely played a role in the formation of the many small linear barrens of the Bedford Barrens study area.

Barrens are found in areas dominated by hard, resistant rocks such as granites, quartzites, and schists. Typical landforms include rolling hills, flat areas, and quartzite ridges and knolls, the latter landforms dominating the northwest corner of the Bedford Barrens study area. The soils, where present, are characteristically extremely restrictive for plant growth - thin coarse, gravelly till over compacted parent material or bedrock; low moisture holding capacity, low in plant nutrients, and strongly acidic. The present successional status of barrens may depend largely on the role of fire in their development - which cannot always be determined. On many sites the shrub-lichen vegetation may represent the climax stage as related to the existing soil conditions. Change would only come about very slowly as a result of soil

development. On other sites, if fire does not intervene, some form of black spruce and/or pine forest cover may eventually develop. In the case of the Bedford Barrens this forest cover would probably be an admixture of the maple, oak, birch and the spruce, fir, pine-maple, birch forest habitats.

Barrens are essentially impoverished habitats, with low nutrient availability and low floral diversity, offering a comparatively small number of niches. Thus barren conditions favour ericaceous (heath) vegetation and lichens. Ericaceous plants are usually woody, acid-tolerant and very resistant to drought. Lichens a pioneer vegetation type, in this case colonizing bare rock. They can also survive very dry conditions. Some of the typical plants found on the barrens within this study area are: Cladonia spp., Cladina spp. (reindeer mosses), Empetrum nigrum (crowberry), Kalmia angustifolia (lambkill), Vaccinium spp. (blueberry), Rhododendron canadense (rhodora), and Cornus canadensis (bunchberry).

The low diversity of plant types and harsh, dry conditions of the barrens do not provide productive habitat for animals. With a few exceptions such as the Maritime garter snake and the masked shrew, birds and mammals are usually only occasional visitors to the barrens from adjacent habitats, particularly during the berry season.

21.

**SWAMP + BLACK SPRUCE, FIR**

Mapped Vegetation Units: 1,2,3,4,5

Total Area: 11.0 ha.

A swamp is a peat-filled or a mineral wetland with standing or gently flowing waters occurring in pools and channels. It is characterized by a fairly open upper tree canopy of black spruce, balsam fir, red maple, and larch and a dense understory of numerous shrubs such as alder, Canada holly, witherod, and false holly.

Topographically, a swamp is a depressional area surrounded by higher ground. It is characterized by a nutrient-rich water table (and sometimes standing water) as a result of seepage slopes, as is the case in the Bedford Barrens study area, or as a result of springs supplying water from the higher ground into the basin. However, there is usually a drainage outlet so that the swamp is generally moderately well drained. Also, hummocks are formed from the decomposition of mosses (Sphagnum spp., Mniun spp., etc.) and herbaceous plants (sensitive fern, cinnamon fern, royal fern, sedges, rushes, asters, orchids, etc.).

The swamp, with its tree cover of mainly black spruce with minor components of red maple, balsam fir, red maple, and larch, very gradually grade into a significantly better drained forest where the above-mentioned tree species become

22.

more evenly represented with respect to their abundance and distribution. This is the beginning of a spruce, fir or spruce, fir-maple, birch forest habitat.

**MAPLE, OAK, BIRCH**

Mapped Vegetation Units: 6,7,8

Total Area: 28.0 ha.

The maple, oak, birch forest is a major early successional forest habitat of southwestern and southcentral Nova Scotia. It occurs as a pioneer forest type on mainly burned or cut upland sites. Under its deciduous canopy, young coniferous tree species such as white pine, balsam fir, and red spruce are regularly found growing.

The maple, oak, birch forest habitat is generally found on drumlinized ridges (often referred to as whalebacks) such as are found in the Bedford Barrens study area as well as hilltops overlying granite, quartzite, or argillite bedrock. Soils tend to be well to rapidly drained, shallow, bouldery, sandy loam to loamy sand glacial till. The site for this habitat is a relatively dry one. These sites are found in the central and northeasterly sections of the study area.

Red maple, northern red oak, and white birch, all low to intermediate in shade tolerance, invade relatively dry sites

which have been recently disturbed by fire or logging, but particularly fire. These three species usually form an early successional forest habitat due to their vigorous stump-sprouting abilities following a disturbance. As well, white birch is a prolific seeder. Initially white pine and red spruce may be found scattered throughout this habitat as a minor component, relics which escaped destruction by the disturbance. Over time, the softwood species will become well established in the stand and thus produce a mixedwood (as in Veg. Unit # 8) or even a pure coniferous forest.

#### SPRUCE, HEMLOCK, PINE

Mapped Vegetation Units: 9

Total Area: 7.9 ha.

The spruce, hemlock, pine forest is a near-climax to climate (pure hemlock stands) softwood forest of much of Nova Scotia.

The three major species are red spruce, eastern hemlock, and white pine, the hemlock eventually becoming dominant. This softwood forest has been degraded by being logged extensively for its valuable lumber.

This habitat occurs mostly on lowland flats and broad, flat upland areas; the lower slopes of low, rugged drumlinized hill complex (as found in the Bedford Barrens study area) and on the steeper slopes along water courses; all over

variable bedrock types. Soils are generally shallow, coarse, bouldery, sandy loams to clay glacial tills.

The removal of pine and fir by insect, porcupine damage, and natural death from the mid-successional spruce, fir, pine and spruce, fir, pine-maple, birch forest habitats would pave the way for invasion by the tolerant eastern hemlock, thus culminating in a near-climax or climax spruce, hemlock, pine forest habitat on zonal sites. Hemlock is the most shade tolerant tree species in the province as well as having the greatest longevity living well over 500 years.

The ground vegetation consists mainly of the humus-moss plant association. In this group Schreber's moss (Pleurozium schreberi), broom moss (Dicranum spp.), stair-step moss (Hylocomium splendens), and the liverwort Bazzania trilobata are co-dominants. This association is particularly dominant on hummocky and rocky sites. Any significant increase in the amount of light reaching the ground surface would allow for the invasion by a number of herbaceous plant species.

Although the soil is acidic, it supports a climax native soil flora and fauna. Small mammals include the red-backed vole, short-tailed shrew, and red squirrel. Redbacked salamander and ringneck snake may be common. The climax forest also includes old, dead standing trees that are utilized by woodpeckers, and provide nesting cavities for hole-nesting birds and den sites for mammals.

Recreational Context of the Bedford Barrens

The Bedford Parks and Recreational Strategy (1989) outlines the identified recreational needs within the bounds of the Town of Bedford. This strategy was drawn up before the question arose of possible integration of the Bedford Barrens into the town's Recreational system and as such makes no provisions for their inclusion.

Recommendations outlined in that study, as well as the recommendations made by Parks Planning Committee and the Bedford Recreation Advisory Committee were reviewed in the context of the findings of the biophysical investigations of the study area.

The biophysical investigations revealed, that although there were some aspects of the Barrens that were very good examples of selected habitat types within the region, that the Barrens provided a lesser capability for interpretive opportunities than did other nearby sites, notably Admiral Cove and Hemlock Ravine (see table below).

	Bedford Barrens	Admiral Cove	Hemlock Ravine
Vegetation Units	10	13	33
Forest Sp.Associations	4	6	12
Habitats	3	8	10

The majority of vegetation units, forest species associations and habitats are better-represented in Admiral Cove and

as a wilderness park would not be justified.

The one habitat type that is well-demonstrated in the Barrens Study Site is the Barrens habitat (whaleback) itself (as noted earlier).

However, the extreme sensitivity to foot traffic of the precariously attached vegetation (on the bedrock) limits the suitability of this habitat for intensive recreational use, which would ultimately take place, given the small park area and a burgeoning population. It would be almost impossible to limit pedestrian traffic to a structured trail under such circumstances.

Consequently, it is felt that the recommendation of the Bedford Recreation Advisory Committee for the establishment of two "neighbourhood parks", as defined in the Parks and Recreation Implementation Strategy would be consistent with the recreational needs of the area. These two parks, (with a total area of 5 to 10 acres, as recommended by the Committee) could be located at opposite ends of the study site, one encompassing the Petroglyphs site, with associated habitats, the other, within the flatter area off the Barrens proper. The specific locations, and configurations would not have to be limited by biophysical constraints.

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APPENDIX A

Site Specific Geology of the Bedford Barrens

The bedrock within the Barrens study area is composed of the Goldenville Formation of the Meguma Group. The name Meguma is derived from the root of a Micmac word indicating their own tribe (Roland, 1982). This formation is dominated by relatively coarse greywacke rocks (referred to as quartzite in earlier publications) of variable depth. Greywacke rocks were formed by the deposition of a mixture of partly-weathered materials including sands, clays and grits. These can be seen, in cross section, at the road cut of the #102 highway through the "whalebacks" which form the barrens within the study area. The member rocks are reported to be of Cambrian to Ordovician age, having been deposited as sediments in a subsiding oceanic basin approximately 500 million years ago (Faribault, 1908, 1909, Roland, 1982).

The heavily-eroded surfaces of this bedrock formation are a result of a variety of forces exerted on these rocks since the time of deposition, with the most recent ones being glacial action during the last ice age. Evidence of this action can be seen in the rounded nature of the surface of the bedrock and the presence of glacial striae (scratch marks caused by glacial movement), tending in a

Narrows) on exposed surfaces.

The surface of the bedrock demonstrates considerable exposure and poor soil development due to the presence of "barren-type" conditions outlined in the preceding document.

At the base of the Barrens outcrops, one encounters a deposit of unsorted glacial till which extends down to the edge of the floodplain of the Sackville River. This is predominantly of a sandy texture with rocks and larger cobbles of variable size distributed throughout. The "till" was deposited, in all likelihood, at the time of the last glacial action, approximately 9,000 years ago. It is of similar composition to that seen exposed on the north side of the # 101 highway across from the Canadian Legion Hall.

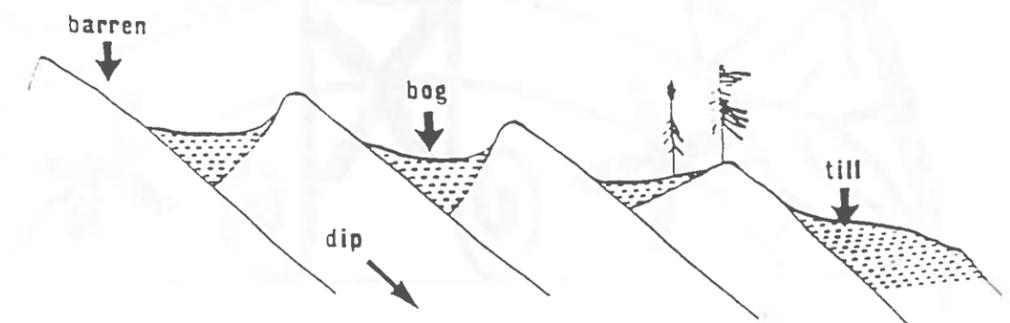
The Study site, itself, is dominated, geologically, by the presence of a series of transverse ridges running roughly from the northeast to the southwest. These ridges represent the exposed edges of a feature referred to as the Bedford Syncline.

The mid-line of the Bedford Syncline is found roughly on a line parallel to that passing through a point just north of Partridge Point and through Mill Cove.

The ridges in the study area are elevated on the northwest and dip down toward the southeast, at angles varying from 19

degrees (at the upper ridges) to 26 degrees (at the lower ridges).

Due to the orientation of these ridges, movement of surface water within the site tends to be along the ridges, toward the Northeast. Because of this, there is little water movement across the ridges, and as such, the intervening areas (between the ridges) are relatively isolated from each other. This is reflected in the vegetation patterns contained in these "intervalles". In addition, soil formation is limited to the bottoms of each of these intervalles, with little movement of soil (through erosive action) between intervalles. (Figure, below)



The ridge upon which the Petroglyphs are found is the first ridge, descending from the high ground, which provides a relatively clear view (unimpeded by other ridges) of the Bedford Basin.

We are determined to maintain our distinct identity by rebuilding and preserving our social matrix because, we are not going away--neither is the "Indian problem" nor our language, some of which is preserved in stone.

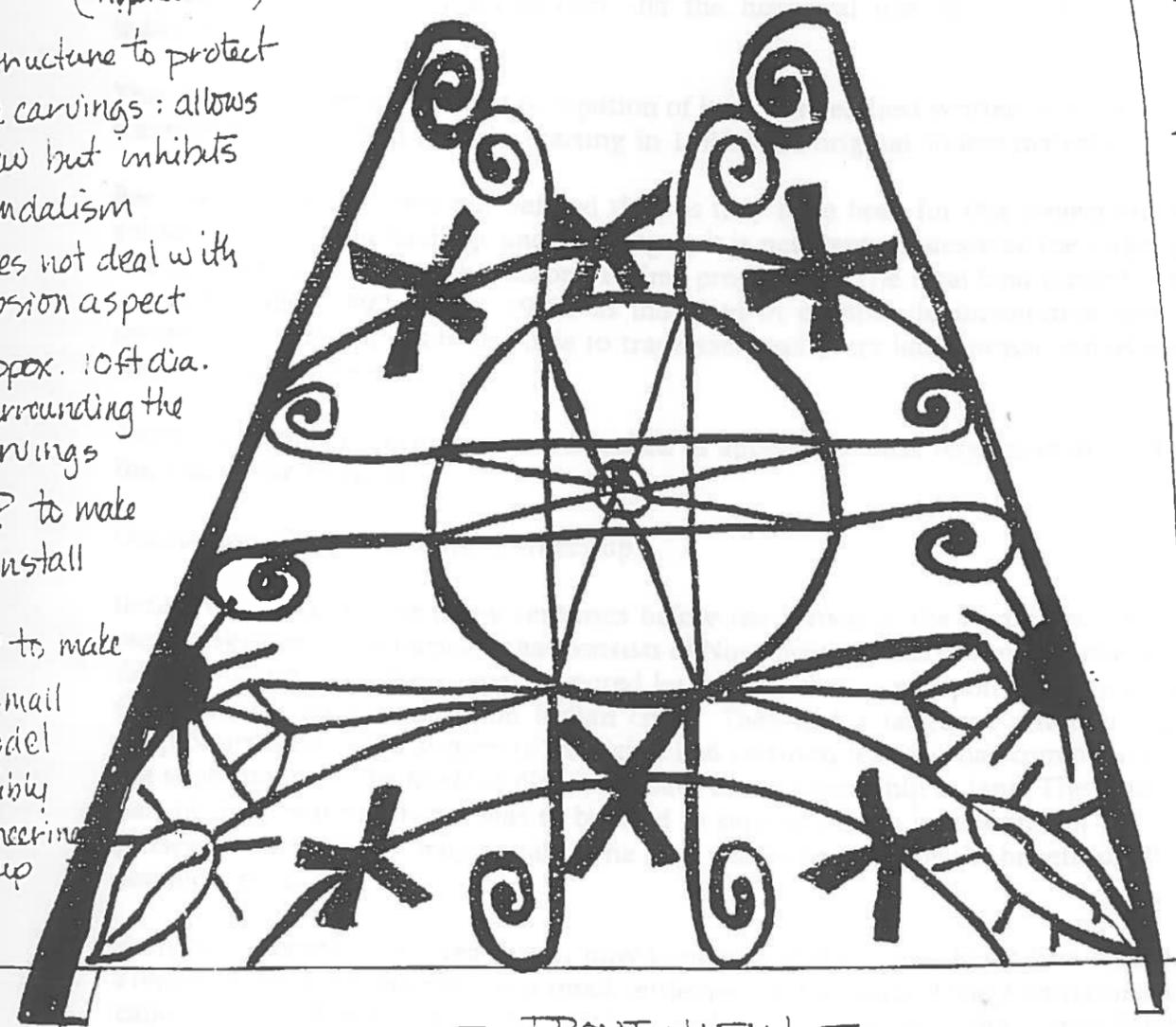
(Appendix A)

(ROUGH DRAWING)

- Structure to protect the carvings: allows view but inhibits vandalism
- does not deal with erosion aspect
- approx. 10ft dia. surrounding the carvings
- ? to make & install
- ? to make a small model possibly engineering group

- serves as epitaph to the ancestors
- visually, enhances the site
- design reflects the original carvings

10 ft. high



— FRONT VIEW —  
(made of cast bronze or wrought iron)

3-D view



## APPENDIX D

### HISTORICAL

#### Introduction

The historical scope has been narrowed to look at two main points: land ownership including the methods of acquisition and the historical use of the land directly and indirectly.

This chapter covers the use and occupation of land from earliest written records, and some transcribed oral Indian records, starting in 1782 with original source material.

Because the Barrens were not defined then as they have been for this project and were a subset of larger land holdings and exchanges, it is necessary to describe the larger picture initially and then to focus the history as time progresses. The total land picture is defined in 1805, 1856, 1892 and in 1991, as indicated in original documentation and official records. No attempt has been made to trace each and every land transaction as would be required in a title search.

Copies of pertinent documents are attached as appendices, and references are included at the end of the chapter.

#### Occupation, Settlements and Ownership

**Indian Occupation.** For many centuries before the arrival of the Europeans, the MicMac were sovereign in the territory that consists of Nova Scotia, Eastern New Brunswick, Prince Edward Island, and the Gaspé. As noted by Bowen, they lived upon fish in the Summer, Game in the winter, and upon Indian corn. They had a language different than their neighbours, and had a system of medicine and spiritual leaders that communicated with the supernatural. The MicMac did not believe in the ownership of land. The land was one part of the Great Spirit that was to be used to support all the inhabitants of the land that possessed a free soul - "mjijaqamij". The land was to be used for the benefit of all, for the common good.

**Early Settlements.** The area that is now known as Bedford was likely first settled by the French. Several references cite a small settlement at the head of the Torrington Bay, now called Bedford Basin. This settlement was probably in support of the French fishing fleet that used Bedford Basin as a storm refuge. It also happened to have bountiful salmon and other plentiful game. During this period from 1600-1750, the ownership of all of Acadia, as Nova Scotia was then called was claimed alternatively by England and France depending

## APPENDIX D

on the outcome of the last European war. (Initial claim by English with Cabot, counter claim by Verazzano Florentine, settled by the French, restored to the French by King Charles 1 in 1632, retaken by Sedgewick in 1654, returned to French by Treaty of Breda in 1667, Port Royal taken by Phipps, Governor of New England in 1690, returned to the French by King William at Treaty of Ryswic). Stability was finally achieved in 1713 with the Treaty of Utrecht, Article XII which gave all of Acadia to England, with the exception of Cape Breton Island. The major settlements at the time were in Annapolis Royal and further up the Annapolis Valley at Piziquid, now called Windsor. The only access to this area from the eastern side of the Nova Scotia was by a trail from the head of Sackville river, that follows the old Windsor Highway. Bedford was then a terminus for the trade that was being undertaken by both the French and the English in this time period.

In order to stabilize the area, and to protect the British settlers, the British governors made a series of treaties with the Aboriginal people. The first treaty that refers directly to the area of Nova Scotia was signed in 1725 at Boston. It promised to respect and protect the lands of the Aboriginal peoples. Fishing, hunting and fowling activities of the indigenous nations were also explicitly recognized. This agreement was ratified in Annapolis Royal, then the seat of government for Nova Scotia, in June 1726 by over 100 individuals, representing the aboriginal peoples of Nova Scotia. Cornwallis, in 2 October 1749 issued a general order "to annoy, distress or destroy the savages commonly know as the Micmacks" because of resistance by the Micmacs to the possession of the land by British settlers. The 1725 treaty was ratified in 1751, with the commissioner of the government Paul Mascarene.

In 1749, Cornwallis arrived in Halifax with a group of settlers. His first duty was to ensure their safety. There were three routes by which the French or the Indians could threaten Halifax. One of them was by the Sackville river using the trail from Piziquid. He therefore sent Gorhams Rangers to the head of Torrington Bay at the mouth of the Sackville River to construct appropriate fortifications. These were completed in October 1749. The fort was then manned continuously until about 1785.

In 22 November 1752, Peregrine Thomas Hopson, who had recently replaced Cornwallis, and the leaders of the Micmac nation signed another treaty confirming the land rights of the Micmacs. Between 1752 and 1763, different governors pursued the friendship of the Micmacs with varying degrees of sincerity. The Micmac also responded from time to time with raids and scalplings of the settlers. Finally, in 1763, after the French were driven from the North America, King George III proclaimed the Crown's intention to buy the lands from the indigenous people for the British settlers, and not to molest or disturb them otherwise. These instructions appear not to have been observed as the commercial opportunities became apparent to the "Lord Commissioners for Trade and Plantations". The various treaties were reaffirmed again in 1779, after an Indian raid on the Miramichi. The Peace was generally maintained in the area until 1780.

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On November 22, 1759, Joseph Scott received the first land grant in the area around Bedford - 850 acres. Eventually he would acquire about 12,000 acres, between the Sackville River to Parkers Brook, to the Waverly Lakes, to the Cobequid Road and to Sucker's Brook. Joseph Scott treated the Micmac people with a great deal of respect, and civility. He was involved in a traditional hatchet burying ceremony that preceded the signing of the Treaty of 1752. At his request he is buried in the Indian burial grounds that run along Fort Sackville Road in Bedford. Notwithstanding his respect for the Micmac, it appears that the local government, in issuing the land grant was not abiding by its own stated policies of compensation of the land to the aboriginal peoples.

As a result of the War of Independence, initiated by the Boston Tea Party, many loyal British subjects fled north between 1775 and 1780. The remainder have stayed as closer monarchists. This unexpected immigration required that significantly more land be occupied by the English settlers and thus be taken from the Micmac Indians. Of interest is the land grant of 488 acres in 1805 to William Sabatier and Foster Hutchison. This land grant is shown on the original map of Crown grants in the Halifax Area in the Appendix. Sabatier was a Justice of the Peace, and Overseer of the Shubenacadie Fishery and Foster Hutchison was a Associate Supreme Court Justice of Boston who fled. The land grant consisted of the area on the south side of the Sackville river and abutted the land owned by George Scott, brother of Joseph Scott. It is shown on the map as an original land grant, although Tolson's book indicates that this land was initially given to George Scott.

Notwithstanding all of the Royal proclamations, and treaties, there does not appear any compelling sense of justice or urgency to resolve the land ownership issue. The sense at this time appears to be to not compensate the aboriginal occupiers of the land for any displacement, and by the weight of numbers of settlers and colonists to shoulder them off their lands. The vulnerability of the Micmac to the European diseases, such as small pox and typhoid decimated their tribes and further reduced their ability to withstand the burgeoning numbers of European and American colonists. There is no specific references that found for any formula for paying for the land, nor any documents that indicate a land sale per se was ever executed. In a related event, the will of Dame Lousia Augusta Wood, daughter of the governor of Prince Edward Island from 1786 to 1895, bequeathed that one half of the proceeds from a sale of 2,573 acres of PEI, which she owned be used for the benefit of the Indians of PEI, who also happened to be Micmac. After some delay in executing the will, this amount was determined to be \$8500.00 and was paid to the trustees of Indian Affairs after 1915. She apparently believed that the Micmacs were owed something for the land.

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### History of Ownership 1805 - 1898

William Sabatier and Foster Hutchison, his brother-in-law were granted the 488 acres as shown on the original map of Crown land grants. This grant includes all of the lands that are now called the Barrens. A copy of the Royal land grant is appended.

William Sabatier arrived in Bedford via New York and Maryland in 1789. He was the grandson of Paul Mascarene, Lieutenant governor of Nova Scotia prior to Cornwallis. Sabatier was an entrepreneur who tried his hand dairy farming using cows from Gloucestershire, cooperage, apple orchards using apple trees from Devonshire and refining whale oil in Dartmouth all unsuccessfully. He had married Foster Hutchison's sister Peggy at St Paul's in Halifax in 1787. He returned to Halifax from England to stay in 1802 and investigated hemp growing in Nova Scotia. He also became a Commissioner of the Poor, repaired the Poor House, was appointed Justice of the Peace, oversaw the relief and care of the black people who settled at Preston and along the Windsor Road. He was made an overseer of the Shubenacadie Fishery and became involved with Sir Valentine Gibb in the planning of the Shubenacadie Canal. He believed it would serve as a back door to small craft through to the Bay of Fundy in case of blockade as was threatened in the War of 1812. His plan included using Parkers Cove, Parkers Brook, to Rocky Lake and to Lake William. He was a candidate in the provincial election, chairman of a committee of merchants like the Halifax board of Trade that advocated a special agent for Nova Scotia be posted at London (a precursor to our own Donald Smith) and High Sheriff of the County of Halifax.

A man of considerable energy, considered as rigidly righteous he continued pursuing commercial opportunities that would provide benefit to all Nova Scotians. He returned to England in 1820, and died at Devonport England in 1826. In 1808, Hutchison and Sabatier sold to Scott and Connolly their land grant. Afterwards it was considered as part of the larger land holdings of Joseph Scott's widow, Margaret and was included as part of the Sackville Estate that now comprised approximately 8000 acres. Neither Sabatier or Hutchison appear to have done any work on the original land grant although considering the energy and spirit of the man it was likely used to finance or leverage his various ventures that were designed for the good of all Nova Scotians.

Between 1808 and 1830 the Sackville Estates appear to have been sold to a John Lawlor, although some of area has been carved off, including some of area around the present Bedford Rifle range. In 1830, the Sackville Estate lands were then conveyed to a LCol William Beresford of Chilwell Hall, Nottinghamshire England who came over to Canada and lived in the Manor House of Fort Sackville. The next transaction was on June 24th, 1837 between Beresford and George Lister where the Sackville estates were exchanged for land in England. Beresford returned home and Lister came to live in the Manor house of Fort Sackville.

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George Lister has been described as a deeply religious man of most unassuming manners, who possessed a strong sense of justice and was very generous to all with whom he was in any way associated. Tolson's book describes many examples of his generosity and religious convictions.

George Lister over the next 35 years bought and sold a considerable amount of land in and around Bedford. As shown on survey maps, dated 1854 and 1856, Lister owned over 1000 acres, including the area now called the Barrens. He also disposed of a considerable amount of the land, including an auction in 1856 of 59 lots in the area between the Dartmouth highway and Shore Drive to take advantage of the Railway coming through Bedford. The Barrens are shown as lots 12-22, parts of lots 26-34, lots 35-47 and 64-66 on the survey map of 1854 by William Faulkner. Lister did not develop these lots, although he had prepared a complete plan of subdivision and laid out all of the lots along First, Second, Cadogan, Nottingham and Division Street. Division Street was the dividing line between his estate and the Mitchells estate to the south-west.

Lister was a very religious man, and in 1864 gave to the Church of England the land needed for a cemetery and a church site at the corner of Wardour and Perth street. He also assisted financially with its construction. Lister made a trip to England, returned with a bride and the bride's sister. Because he had previously sold the Manor house to Peter Ross, he built another residence at 18 Dartmouth Highway, now owned and occupied by Gordon Hargreaves. He then changed religions to become a "Plymouth Brethren". When he died in 1871, was denied burial in the cemetery which he had donated. He left all of his goods to his wife as shown in the attached will, including about 603 acres in and around Bedford which was evaluated at \$5940.00. His wife, Katharine died in 1873, and left to her sister, Mary Ann Henrietta Brockwell, all the same property from George Lister which was now evaluated at \$5040.00. This property included 37 acres of marshland (\$1800.00) - likely the area around Lily lake on the Rocky Lake Road; 418 acres of Gordons hill (\$2200.00) - including Jack's lake (called Coked Hat lake), the Barrens, all of Central Bedford north of Division Street; 3 acres of Hay Island (\$240.00) (location unknown); 145 acres of Buckwheat hill (\$800.00) - land to the East side of Rocky Lake Drive where Municipal has their plant; and the marsh in front of her house - the Wardour centre and the Town library are now located there. After extensive searching, no survey records of the land conveyed by the wills were found, other than these vague descriptions. As it turns out, there was considerably more land than the 603 acres that were initially identified that came to be owned by Brockwell.

Brockwell, a spinster, wrathful of the treatment shown by the Church of England to her sister and brother-in-law donated another piece of land to be used as a cemetery for the other faith.

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Lister and his wife were initially buried in a private plot that overlooks Parker Brook, near where the Dartmouth highway passes over it. They were moved in 1949, at the instigation of Reverend T W Isherwood, Rector of St Paul's church in Halifax and joined Mary Brockwell in the Brookside Cemetery on Wardour Street.

Brockwell died in 1892 at her house at 18 Dartmouth Road. In her last years, she had adopted 2 orphaned girls and brought them up in a rigorous way and in a very religious and strict sense. Brockwell in her will, gave to her executors all the real and personal property from her estate. The executors were to appoint a matron, "best suited for the education of female orphans and to permit such matron and orphans for whose benefit these provisions are made to occupy the house in which I now reside together with about 40 acres of land adjoining thereto". This refers to the land behind 18 Dartmouth highway, called the Brockwell subdivision. "...shall select as many female orphans in destitute circumstances both of whose parents being dead as the funds in the hands of the trustees ... shall be sufficient to maintain and place such orphans under the charge of such matrons there to remain until they attain the age of sixteen years when such orphans are to be placed as servants in Christian families. I hereby direct that the said orphans shall be taught to read and shall read daily the Holy Bible." The executors of her will were Philip C Hill, James Thomson, George Thomson, James B Morrow and Ambrose J Church. Ambrose Church was removed as an executor in a codicil to the will in 1887. A copy of her will is in the Annex.

### History of Ownership: 1898 - Present

The terms of Mary Ann Henrietta Brockwell's will were never carried out as she wished. Instead, George Thomson, the last living executor applied to the Supreme Court of Nova Scotia in March of 1898 to either get another set of executors, or to dispose of the funds and the estate in a legal action called "cyprès". Cy près means to allow a varying of the terms and conditions of a will in order to best fulfil the purpose of the will. The first problem that Thomson had was determining the defendant. He selected Charles C Blackadar, Charles H Blackadar, Hugh Blackadar and Henry Blackadar as the nearest living relatives to Brockwell. The reasoning for this determination is not clear. However, at the time, Charles Blackadar was the secretary of St Paul's Alm House of Industry for Girls in Halifax, an orphanage that was run as a charitable society under a provincial charter. After Henry B Stairs, was appointed as a special referee, and presented his report, the Supreme Court of Nova Scotia determined that the St Paul's Alm House had the same goals as was the intention of the will of Mary Brockwell and ordered that all of the assets be turned over to them. On 5th May, 1898, St Paul's Alms House of Industry for Girls became the largest landowner in Bedford with the extent of the "land at Bedford and Sackville N.S. Bounds undefined".

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St Paul's Alm House of Industry for Girls was established in January 1867. Its object then was the "protection, training and instruction of poor and friendless female children, with a view to fit them to take positions as domestic servants and for other employment which their training may qualify them usefully to undertake." In 3rd May 1887 it was incorporated as a charitable society. In 1892 it was registered as an agent for the Province for orphaned girls. On 11 July 1906, the Governor in Council approved it as a Children's Aid Society for the purposes of the Children's Protection Act of 1906. In 1908, the name was changed to the St Paul's Home for Girls, in 1970 was changed to St Paul's Home and in 1982 was changed again to St Paul's. Its charter has remained basically the same until 1969.

It was established, initially as an experiment for one year, to provide something similar to the Industrial School for Boys that gave promise of much benefit to the community. A house was rented, funds gathered from the benefactors, medical service arranged and a matron and teacher were hired. 8 girls were initially sponsored into the Home. The experiment was a success and continued. Over the next 50 years between 5 and 30 children were residents of the Home at any one time. In 1871, their building on Tower Road was purchased for \$4000, and the mortgage held by the Collins family interest free until 1941, when it was paid off. The children were well fed, clothed and schooled. Their activities were supervised by a Matron, and the Committee of Ladies from the Board of Directors. From a reading of the minutes, this school was a very strict school. Several children were disciplined for "severe rudeness to the Matron".

The Home always depended on the largesse of the St Paul's Sunday School or benefactors to keep it afloat. Cash Flow management was a mandatory skill of the Matron and the St Paul's board.

The children were normally sponsored by either a parent or parents who couldn't look after them. were normally from within the St Paul's Parish with a provable Anglican background. On several occasions children who had non-Anglican parents were refused admission to the Home. After 1903, the Government used the Home as an agent for Children's Aid and sponsored the children regardless of their religion. Sponsoring normally meant that a monthly payment was made to the Home to keep the children there. In a few cases, children were returned to their parents when payments were not kept current. In other cases, the children were adopted into the Home and then adopted out to families, after a thorough character check of the adopting family.

Over the years, St Paul's has been bequeathed money, and securities. After it was appointed a government agency for the Children's aid, funding from the government grew steadily as a percentage of its total income. Income was also derived from the interest on securities. From time to time, some securities were cashed to meet short term expenses. Funding alternatives were discussed as early as 1956, when aid from the Community Chest was

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sought but not agreed to. In 1958, the object of St Paul's was amended to read "care, training and instruction of girls".

The constitution of the Home was revised in 1963 to:

- a) provide a home for orphaned girls where they can find love, security and Christian Training;
- b) to care for girls from broken homes with the view to helping them become useful citizens;
- c) to provide the advantages of disciplined living for girls whose environment is suggested to incline them to delinquency.

In 1967, the finances of the Home turned around completely with the sale and expropriation of land in Bedford for the Bi Centennial highway. All debts were erased and securities on deposit were evaluated at \$164,182.75.

The Home continued to provide for 3-15 girls until June 1969 when the Home was completely renovated. Its role was redirected to provide accommodation for young ladies engaged in courses of study while away from home. If these girls happened to come along with a small child then her particular case would be reassessed at that time. In 1970, the name was changed to the St Paul's Residence for Girls and it actively sought to provide to girls over 16 years of age who were following a course of instruction, residential facilities and meals at a reasonable rate. In 1972, the Home was opened up to blind students from the Halifax School for the Blind and averaged 9 girls in residence.

Presently, St Paul's provides financial support to other social agencies in and around Halifax. At present, they support the Lane clinic, the Phoenix house, the Brenton house and the Jubian House.

St Paul's has since 1904 sold off some of the parcels of land that made up the Brockwell estate through an agent. A list of the transactions is contained in the Appendix. However, between 1905 and 1967 it was never very clear to St Paul's exactly what land they did own. In 1928, Malcom Mitchell built a house on land in Bedford that the Institution owned for which he claims that he has paid but apparently no deed. The Secretary gave a deed to Mr Mitchell on his paying to the institution the amount due for the taxes for the past three years. Of interest is the sale in 1929 of the 2 lots to be used as a Cemetery on the Windsor highway for \$200.00. George Lister has provided the final resting place for all of Bedford, one way or the other. Frequent complaints are made in the minutes of St Paul's about lack of survey of the Bedford lands. The final survey was conducted in 1973 as a result of interest expressed by Atlantic Sand and Gravel in purchasing a substantial portion of the Rocky Lake Property.

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Money from these sales has allowed the St Paul's to keep operating, and provide the orphanage that Brockwell wanted in Bedford. It is ironic that the Church which she disliked so much was the instrument of execution of her will. Her land was used to provide for the common good of her female orphans.

When the Bi Centennial Highway land was expropriated from St Paul's in 1967 and the Jack's Lake land assembly put together by the Nova Scotia Department of Housing and CMHC, St Paul's was transformed from a struggling social agency to a wealthy benefactor with assets over \$1 M. Its scope has expanded to provide financial assistance to other struggling social agencies. The land in question was again derived from Brockwell in 1898.

St Paul's still owns 25 land parcels in Bedford with the largest one being 318 acres between the Industrial Park on the Rocky Lake Road and the Bi Centennial Highway. The next largest parcel is the 12 lots within the Barrens area.

### Present Ownership.

There are 13 owners of the land that now comprises the Barrens. They are shown on the attached map and are listed in the Appendix. Of note are two major land owners- St Paul's whose land transactions have already been described and Redden Brothers. The Redden Brothers own the majority of the land in the North easterly section of the Barrens, approximately 27 acres. All of this land was previously owned by St Paul's, but was sold off to various people since 1900 in bits and pieces. The land has been re-assembled over the last 10 years by the Redden Brothers. In 1965 Basil Spears purchased lots 34a, 39a, 47a, 35a, 41a, and 40a as shown on the original Lister subdivision of 1855 at a tax auction sale for \$7100.00. These lands were subsequently acquired by the Redden Brothers in 1976 as a result of estate liquidation for \$50,000. In 1988, the remaining land to complete the assembly was purchased from St Paul's Home. This parcel of land remains undeveloped at this time.

### Historical Uses.

#### Earliest Use by Mic Mac.

The MicMac Indians were observed by both the early French and English settlers in the area at the mouth of the Sackville River, using the area as a summer camp catching the plentiful salmon at the river mouth, hunting, gathering of berries, medicinal herbs and performing of festivals. Records indicate that the French were the first European nation to be in contact with the MicMac and that there was a treaty between the French King Louis XV and the MicMac chief ???? in 16XX. French settlements were established throughout Acadia, which included Nova Scotia there appears to be no contest for land title. The MicMac and the French assisted one another in the fur trade. The major influence on the

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MicMac was the introduction of the Roman Catholic religion, by the Jesuits, and the import of European diseases to which the MicMac were susceptible. However, throughout Acadia, the MicMac were still considered the "landowners".

Use of the Barrens after 1805.

This area has never been cultivated for agriculture because of its rough nature. In the original deed in 1805, from Wentworth, Governor of Nova Scotia it was described as "Chiefly Barren, Broken Land and for the most part incapable of cultivation". In the description of the property consisting of the Barrens, by George Thomson, executor of the estate of Brockwell, it was stated by affidavit to be "wild land in Sackville ... the greater portion of which is unproductive and of little value."

At the turn of the century, lumbering was carried on in the area above the Barrens, around Jack Lake and Sandy Lake. Jack lake was used to store the logs. A trolley type car carried the saw logs on a wooden track from Jack Lake through the Barrens to a field at the end of Cunningham Street. The logs were then loaded on horse drawn wagons and ported to the Basin to the numerous sawmills. During this time there were at least three mills in operation - Moirs sawmill at Mill Cove, Harts Mill at the Lion's Playground and Richardson Mills, at various locations around the Basin.

There were five main trails through the Barrens, most of them going to Jack's Lake. Several of the trails followed the natural run of the Barrens. The main one started at Cunningham Drive on First Avenue and another extremely narrow and steep path started at River Road (Union Street). A third path started at Borden went up to where Emerson is now and joined the main Jack Lake road and River Road at the same location. These trails were used extensively in the early 1930's until the 1967 when the BiCentennial Highway cut off the Barrens from Jack's lake. During that time, this was the only foot access to Jack Lake.

This area has been used by the families children of Central Bedford and other town residents for picnics, nature walks, family outings and pitching woo. Girl Guides were known to use the area as a camping area and for nature trials and hikes. People have used it snare rabbits and other small game. There has been no known usage of the area by tourists.

### Summary

The twists of history that involve the Barrens represent the history of Nova Scotia. The Barrens have been occupied and used by the Micmac for their common good, have supported and defended the early settlers for their common good, grub staked the entrepreneur Sabatier for the good of all Nova Scotia, were part of the grand plan of Lister

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for the common good of Bedford and provided the access routes to the natural forest resources that lay at the back door of Bedford for the good of the early businessmen of Bedford. The Barrens have provided this service without themselves physically changing. Since 1898, the Barrens and the sale of other lands from the Brockwell bequest have been the land bank to be used for the betterment of orphan girls. This land has allowed St Paul's to be the effective and powerful social agency that it now is. Historically, this land has always been used for the common good.

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LAND SALES BY ST PAULS FROM 1900-PRESENT.

- I. 18 Dartmouth Road - Brockwell Homestead - bought 1913 by Chief Bayers, Chief of Police of Halifax, for \$550.00. He kept it until 1939/40. Chief died, brought in a girl to help in house. Mrs Bayers caught her dress on fire, rescued by the passing milkman, who got her to hospital, returned home, died of infections. Daughter sold the land to Art Hustins. Likely then sold to Tom McGuire who rented it out for several years. McGuire sold it to the present owners Gordon Hargreaves. Vignette: Hargreaves was told the house was haunted, by the two art teachers who rented the place. During the renovations, hargreaves was painting the upper hall, and smelled smoke. interesting because the fireplace was not lit and it was in the middle of summer. The source of it could not be found. Vignette 2: Apparently the house was used by the Vicar, who also stabled his horses in the present Barn area. He was noted for walking around the grounds, with a small bottle of spirits to keep off the night airs. It was reported that he used to hide them in the rock wall which was along the back of the property. Hargreaves has found several of the bottles, which are of the time frame XXXXXX.
- A. Revenues generated by the Brockwell Properties:
1. 1903 - Land sold to JE Roy for \$400.00 (lot # ???)
    - a. 1904 - 1907 \$30.00 per year for the right to cut timber on the property.
    - b. 1906 - Brockwell Bequest of \$3500.00 now on deposit at 3% be loaned out at a better rate.
    - c. 1908 - sold JE Roy another piece of property, likely beside the first one.
      - (1) 1910 - August - received \$100.00 from sale of some land in Bedford to Judge Meagher.
      - (2) 1913 July - Sold land to All Saints Church for \$550.00; March - sold lots 55,56 and 57 of the Lister lands; May - sold house on the Brockwell property for \$550.00
      - (3) 1914 April 8th - sold land to Mr Knight for \$200.00.
      - (4) 1915 October - sold undisclosed amount of land in Bedford for unknown amount.
      - (5) 1916 Sold property near the rifle range for \$35.00.
      - (6) 1922 May - At the annual general meeting, motion passed that all 400 acres of Brockwell estate should be sold and money invested.
      - (7) 1923 April - At the monthly meeting, offer of \$2600 was made for land. Decided to sell it off in chunks as opposed to one whole block.

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- (8) 1924 - November Sale of 2 lots to mr Saunders finalized.
- (9) 1926 - Mr Christie placed in charge of the Brockwell properties empowered to sell them. For sale signs to be placed on the Bedford property.
- (10) 1927 - Mr Saunders replaced the recently deceased Mr Christie as the agent.
- (11) 1928 - Malcolm Mitchell paid \$150.00 for some of the Bedford lands but was never given a deed. He had been living on the lands for 3 years. He was asked to pay the last 3 years taxes and he would be given a deed by St. Paul's. Sold 2 lots to the trustees of the Public Cemetery in Bedford for \$40.00.
- (12) 1930 - Captain Saunders asked for a copy of the plans for the Bedford properties.
- (13) 1931 - sale of lots brought in \$1000.00.
- (14) 1933 - August - proceeds of any sales of the Bedford property be placed in the Capital Accounts in future.
- (15) 1935 - Department of Highways paid \$187.50 for property needed to widen the Waverly road.
- (16) 1936 - Sale of stone from Bedford property authorized at 8 cents per yard, and sold a property lot for \$120.00; plan of all properties in Bedford belonging to the home made by Mr Jubien.
- (17) 1944 - verbal offer of \$1.50 per cord of hardwood from Bedford lands was refused. Surveyor was approached to do a proper survey of the Bedford lands.
- (18) 1946 - Fred Emerson appointed to look after the sale of Bedford properties at 10 % commission.
- (19) 1947 - \$6500 received from sale of lands in Bedford, as well as \$50.00 from the sale of wood.
- (20) 1948 - Sale of properties suspended until new survey completed.
- (21) 1949 - Erection of a Memorial to the "two benefactors" who gave the land near Waverly to us. Remains were disinterred and moved to Brookside cemetery. This refers to George Lister, his wife Katharine and to Mary Ann Brockwell.
- (22) 1950 - Sell some property for a new school near Waverly for \$2500.00 and to pay for the right of way to the land being sold.

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- (23) 1951 - Received \$2500 from the sale of lands in Bedford.
- (24) 1953 - Interest in the Bedford-Sackville properties was quite keen, with 45 properties being considered for sale.
- (25) 1954 - Bound copy of all deeds and descriptions of land given to St Pauls by Mr Jubien.; December - Brook street handed over to the Bedford Service commission by conveyance.
- (26) 1955 - Mr Fred Emerson replaced by G A Tolson in looking after the lands in Bedford, with the same 10% commission.
- (27) 1956 - Sale of gravel provided \$2100.00, sold 4 acres of land in Bedford to Municipal Spraying for \$2500.00.
- (28) 1958 - sale of several more Bedford lots and an option for 6 lots for \$3,000. Another potential buyer for 200-300 acres had approached St Pauls but no price was quoted. Nova Scotia Light and Power was given a deed vice an easement for their power lines over St Paul's property, and will cost \$4000 when land has to be sold.
- (29) 1960 - October - surveyor retained to produce subdivision plans for the property. Work was slow in starting. Plans for the bicentennial highway were underway and the province would need some of the land.
- (30) 1961 - Jan - Mr Coffin engaged to protect the interests of St Pauls with the Bedford lands.
- (31) 1961 - June - two more lots sold in subdivision for \$700.00
- (32) 1961 - July - several more lots sold for between \$500.00 and \$700.00 in the subdivision.
- (33) 1961 - Oct - sale of fill from the Bedford properties \$6000.00
- (34) 1961 - Nov - Tolson provided a plan of the Bedford properties that contained 690 lots and will provide adequate space for shopping areas, schools, and Churches and any service which could be expected in accordance with the regulations of the National housing Act. This plan was presented to the Deputy Minister of Highways, Mr Wickwire. I believe that this was the Jacks Lake Development.

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- (35) 1962 - May - MacInnis offers to pay \$750 per acre for eighty acres. Highway department need 480,000 sq ft (11 Acres) for the Bi Centennial. Financial Statement - Income: government - \$3600; Investments - \$4000; Sale of Fill - \$8500; Bank loan - \$6500; Total Receipts - \$24,700. Expenses: \$20,585. Value of Securities held - \$140,000.
- (36) 1964 - Jan - Department of Highways offered \$2,750 for 11.5 acres of land for the BiCentennial Highway; later accepted in May.
- (37) 1964 - October - land sales of Bedford property continued, others were turned down.
- (38) 1966 - October 3rd - received \$75,000 for sale of land from Provincial Government, also reported in November that received \$101,866 for land required by the Bi Centennial Drive, plus another \$6800 for right of way of NSLP across land near Municipal Spraying. Sold last two lots of Brockville (sic) lands for \$850.00
- (39) 1967 - as a result of the expropriated property along the Bi Hi, able to pay off all bills and invest an additional \$95,000. Total securities stood at \$164,182.75.
- (40) 1968 - estimated land value of Bedford Property was \$55,000.
- (41) 1969 - Claimed to hold 500 acres in Bedford. Sold 14 acres in Waverly for \$12,000; option extended to Municipal for 205 acres at \$1000 per acre. Sold 14 Acres to Centennial Trailer Sales for \$12,000
- (42) 1970 - We do not sell any more lands unless absolutely necessary. until a developer buys all the land and absolutely no more piece meal sales be made.
- (43) 1971 - sell James Reardon 7 and 1/2 acres for \$45,000.
- (44) 1972 - Feb - Sell fill from Bedford for 3 to 5 cents per cubic yard; sell 205 acres to Speed and Speed for \$550 per acre, and a small strip of land to an adjacent property owner for \$1000.
- (45) 1972 - March - Department of Highways purchased 7.85 acres for \$15,000.
- (46) 1973 - Jan - Another \$3700 worth of fill sold from Bedford properties. \$108,300 received from the sale of 205 acres to Speed and Speed.

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- (47) 1973 - Dec - 9 acres sold for \$16,000.
- (48) 1973 Land Holdings consisted of: 205 Acres under option to Municipal (on rocky Lake Road). 75 acres adjoining this land. 4 acres, 7 plus acres, 34 acres on Division street ( this is the west part Barrens area), 7 acres on Division Street (this is the east part of the Barrens area) and another 5 acre parcel.