

CANADA – HERITAGE @ RISK!

Political background

The preservation, protection, conservation and presentation of cultural heritage in Canada are under the jurisdiction of three different levels of government.

1. Federal government:

The federal government has acquired tools for the management of national cultural heritage. Decades ago, the Historic Sites and Monuments Board of Canada was created to designate sites and monuments of national heritage significance, subject to ministerial approval. There are however no firm protection measures accompanying the designation process. Canada is a party to the World Heritage Convention, concluded in 1976 and the Hague Convention, concluded in 1999.

In 1982, the federal government adopted a policy on federal heritage buildings applying to all federal buildings that are at least 40 years old in order to evaluate their potential heritage value and preserve the heritage character of designated federal buildings. The Canadian Environmental Assessment Act followed. Both laws focus on minimizing impacts and reducing potential risks to federal heritage buildings.

In 1990, Parks Canada, part of the Department of Canadian heritage, re-evaluated its policy on national historic sites, heritage railway stations, historic canals, underwater archaeological reserves, federal heritage buildings, etc. and introduced a policy on the management of its cultural resources. The concept of commemorative integrity of the historic site and its cultural resources was put forward to minimize any threats to the integrity of their heritage values. Parks Canada developed several tools to evaluate the risks to its cultural resources and to their physical condition for maintenance purposes.

The majority of national historic sites are however private property. An assistance program (shared-cost) was implemented by the federal government for the owners of national historic sites as an incentive to protect the site and its cultural resources heritage values.

2. Provincial and municipal governments:

Nearly all provincial governments have cultural property legislation for the purpose of heritage preservation. (See Web site of the ICOMOS Canada legislation committee at: www.icomos.org/canada and select Committees and then Law, Finance and Organization).

Provincial and municipal governments are responsible for their cultural heritage. They have the authority not only to pass regulations to safeguard their heritage, but also to amend, present and utilize these resources etc., and sometimes also to implement measures to encourage their preservation.

Canada's cultural heritage

As in all countries in the world, Canada has an impressive variety of buildings and structures reflecting the cultural values of

the society that shape part of Canada's cultural identity. Some kinds of buildings and structures are seemingly forgotten in the implementation of the heritage conservation process. They are:

1. Small buildings, historical residences and all other structures of heritage interest, such as religious heritage in urban settings and in towns, are constantly threatened by social change, and sometimes exposed to environmental conditions that threaten their physical integrity and heritage values. As the actual guardians of this heritage, the owners and citizens have little or no resources to provide minimum protection of their cultural heritage.
2. Silos (grain elevators) in the Canadian prairies are complex structures with significant heritage and symbolic value. Their functional importance reflects their role in the country's economic development. A nearly systematic abandonment of these massive structures accelerates their deterioration and a lack of financial resource jeopardizes their architectural and structural integrity.
3. Industrial sites that bear witness to revolutionary technical prowess and economic growth are both well and poorly maintained with respect to their architectural and structural integrity. Inappropriate use or demolition are often the result of urban development, given the great capacity for re-use, rehabilitation, and even use of land for more lucrative purposes.
4. Monumental structures such as Fort Prince of Wales, built in 1749, in Churchill Manitoba along the Hudson Bay, with its imposing Vauban fortifications-style masonry works, pose complex conservation issues and problems in a northern climate. The national historic site is under the jurisdiction of Parks Canada, which has used a series of resources to maintain its commemorative integrity, but the severity of the problems (physical risks) are gradually discouraging their efforts. New approaches are investigated.
5. The federal government and the provincial and municipal governments are responsible for the physical condition of their properties and the maintenance of their heritage values in order to minimize the impact on social and economic values. The federal government has mechanisms to evaluate and identify the potential risk to its cultural resources for maintenance and recapitalization purposes. To diminish the risks to heritage structures and buildings, preventive measures are often taken by the other orders of government.

Understanding the risk

Perhaps preventive measures should be promoted in order to reduce emergency measures. The risk to architectural heritage is of two types: unforeseeable risk such as natural disasters, and foreseeable risks such as deterioration, lack of maintenance due to limited funding, environmental condition, negligence etc.

ICOMOS Canada worked with an interdepartmental committee of about ten federal departments, agencies and various non-governmental organizations (NGOs) to organize a second summit on risk preparedness in Canada. The purpose was to devise an overall strategy to prevent primarily unforeseeable

risks. The project submitted to UNESCO's risk-preparedness committee was denied funding. The committee would like to launch the project again for 2001.

Except for the federal government, there is no clearly defined mechanism at the provincial and municipal levels with respect to monitoring, preventive measures, emergency repairs and restoration work.

Conclusion

1. It is difficult to identify cultural heritage at risk in Canada since management tools are incomplete. An understanding of the potential negative impacts should serve as the basis for grading risk (for instance: potential risk, dormant risk, active risk) or rating risk (for instance: low, medium, high risk).
2. Develop appropriate tools or mechanisms to make an inventory of, evaluate and identify the cultural resources whose physical and heritage values are at risk based on new grading or rating.
3. Promote a partnership (three levels of government, non-governmental organizations, etc.) in order to establish a shared, overall approach to risks by organizing the second international summit on risk preparedness in Canada.

Case Study 1 – Threats to the structural integrity of Fort Prince of Wales

Historical Context:

Situated on the outskirts of the Hudson bay in Churchill Manitoba, Canada, Fort Prince of Wales is a National Historic Site administered by Parks Canada. The Hudson Bay Company built a fortress from 1733 to 1771, to establish its presence and to en-

sure control of the fur trade. The design of the fort was inspired by the Vauban fortification system. Despite the 40 canon heads in the fort's embrasures, part of the escarpments and bastions were severely damaged during the attack led by French General La Pérouse in 1782.

Heritage Value:

The heritage value of the fort resides principally in its architecture, its use of local materials, and the quality of the craftsmanship. The construction of the fort consists of dressed stone masonry for the exterior surface and fieldstone (stone sizes reaching up to approximately 2 cubic metres), to fill the nearly 12 metre thick walls. Local stone is called Churchill quartzite and was originally used and linked with lime mortar.

Understanding Heritage Value:

Maintenance, restoration and reconstruction work were done in the 1930's, 40's, and 50's to reveal the original form of the fortress and to repair the damages caused by the 1782 attack. Over the past decade, many monitoring and maintenance investigations, engineering tests (geotechnical, statigraphy, stereo-photogrammetry, fibre optical, etc.), material analysis and mortar studies have managed to determine the profile, characteristics and behaviour of the masonry system.

Threats to Heritage Value:

Beyond its history of 200 years, time and Nordic environmental factors have worn the fort's features to the point that its architectural and structural integrity are completely threatened. The extent of the physical, mechanical, chemical and biological threats are unpredictable as they depend on natural events such as water infiltration; melting snow; freeze-thaw cycles and their association with thermal movements; lateral pressures associated with the dislocation of stones or even wall collapse.

Bird's eye view of Fort Prince of Wales, fortress of Vauban type (1731–71), Churchill, Manitoba



Shoring, Point of the North-West bastion, Fort Prince of Wales, Churchill, Manitoba



Conservation Strategies:

Strategic actions have been put forward to halt the deterioration process that has been unfolding for decades. They can be resumed as: emergency shoring measures; continuation of monitoring to detect movements in the masonry assembly; completion of material analyses; development of conservation options and an analysis table regarding impact on heritage values; and the choice of an option to aiming to minimize all threats and to protect the heritage values of Fort Prince of Wales.

Case Study 2 – Halting threats to the Claybank Industrial Site

Historical Context:

Situated on the Dirt Foothills, of the expansive Canadian prairies, on the south-west of the province of Saskatchewan, the Claybank Brick Plant is a National Historic Site that belongs to the Saskatchewan Heritage Foundation. The industrial complex took form between 1912 and 1937 and was in operation until 1989. The Claybank plant was recognized within Canada and North America for its heat-resistant and architectural bricks named: “Ruff Tex” and “T-P Moka”. The daily production of brick went from 20,000 in the plant’s beginnings to 100,000 in its later years.

Heritage Value:

As for all national Historic Sites in Canada a Commemorative Integrity Statement was developed to determine the reasons for the site’s national importance, based on the recommendations of the Historic Sites and Monuments Board of Canada and followed by ministerial approval. Significant heritage value resides in the remaining wood and brick structures (10 kilns, 5 stacks, heat and drying tunnels, the laboratory, the administra-

tion building, the Clay shed, delivery warehouse for the train, etc.), that safeguard the authenticity of the site and its materials.

Understanding Heritage Value:

For almost a decade, archival research on construction techniques for kilns and drying tunnels; inventories of cultural resources such as machinery; the photogrammetry reports; material analysis of brick and mortar; monitoring and a multitude of engineering tests have led to the determination of the profile, characteristics and behaviour of the masonry system. Several interventions, emergency measures and monitoring programs have taken place since 1989 with the intent to maintain the architectural and structural integrity of the buildings.

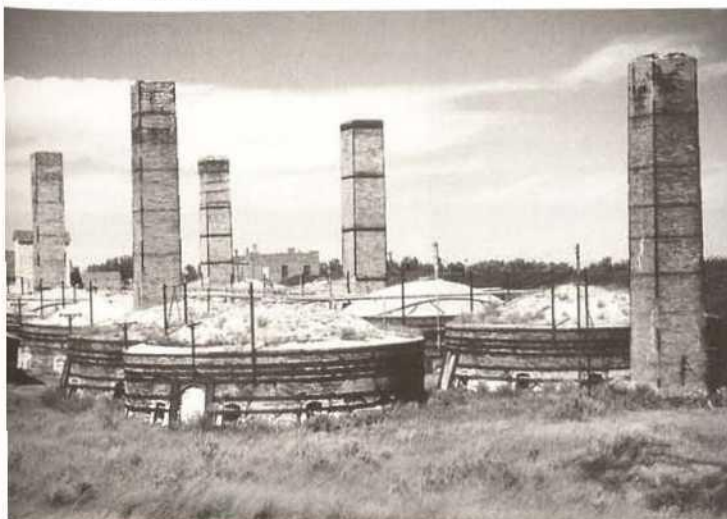
Threats to Heritage Value:

After 90 years, the environmental conditions of the prairies are negatively impacting on the material features of the site, such as progressive disintegration of the brick and mortar. Monitoring permits the evaluation of impacts on architectural values, such as the movement of cracks, the deceleration of a slow dislocation of the brick, and to determine the inclination of the stacks related to the variations of changes in their centre of gravity caused by geotechnical pressures of the ground and the wind.

Conservation Strategies:

The Saskatchewan Heritage Foundation negotiated a shared cost agreement in 1998, through the national program of the Canadian Government for owners of National Historic Sites. One of the key components of this agreement is the production of a report for conserving and presenting the site. The report defines the conservation objectives and conservation program with the ultimate goal of reviving the spirit of the place. These financial means ensure that concrete and strategic measures are established to halt threats to the architectural and structural integrity of an industrial site that is unique in Canada.

General view of 10 kilns and 5 stacks (1912–37), Claybank Brick Plant national historic site, Claybank, Saskatchewan



Typical deterioration, Kiln No 5, Claybank Brick Plant, national historic site, Claybank, Saskatchewan



Case Study 3 – Cultural Landscapes in Urban Areas: Le Mont Royal, Montreal

Description:

Mount Royal is a small mountain in the centre of the Montreal metropolitan area. It results from deep volcanic activities and glacial erosion. Mount Royal gave Montreal its name and gradually changed from a natural feature into a cultural icon with a diversity of associated values and a remarkable concentration of cultural heritage, monuments and landscapes. The resources on this large site are quite diverse: archaeological flint tool sites, buildings and land division patterns going back to the early days of the French settlement, large institutional campuses from the 19th and 20th centuries, large cemeteries reflecting Montreal's religious and cultural diversity, the 1876 Mount Royal Park designed by Frederick Law Olmsted and a historical visual presence in the city and the St Lawrence valley. The site covers a territory of about 700 ha, spread over three municipal administrations: Montréal (1 million inhabitants); Outremont (23,000 inh.) and Westmount (22,000 inh.).

Recognition and protection status:

Although the mountain has been recognised as an entity for centuries, the Canadian constitutional structure resulted in an ineffective and often conflicting patchwork of regulations and statuses for this area.

- Up to now, the task of managing, planning and preserving this urban cultural landscape has fallen mostly on the three municipalities. Those are primarily public administrations meant to provide basic services using the property value tax

as their main source of income. Each of those three has its own local interests, commitment and regulations to protect its portion of the site. In 1992, the City of Montreal adopted a masterplan which includes measures to protect visual links with the mountain but these are no longer fully enforce. Montreal puts remarkable efforts in caring for the park but welcomes high density projects around it despite their visual impact on the mountain. The smaller Outremont and Westmount are mostly residential and have paid a greater attention to the landscape and heritage value of their whole territory but have also authorised private and public projects without full consideration of their impacts.

- The Quebec government has the powers to protect. It applied its Cultural Property Act to classify some isolated buildings and tried to co-ordinate without much success the action of its own ministries on properties that in this territory includes such as some of the large hospitals and public universities.
- The Canadian Government owns properties on the mountain. It has declared some buildings as well as the two main cemeteries – Protestant (1852) and Catholic (1854) – as National Historic Sites, a status that enables to receive grants for conservation work. In 1999, it demonstrated its inability to protect heritage in its ownership when it sold part of the historic *Domaine de Saint-Sulpice* that had become the Army's regional headquarters, to a developer without any binding conservation conditions for the site.

Risks:

Mont Royal's landscape, ecological and architectural integrity as well as its place in the greater landscape, are at risk from development pressure, ineffective protection and the lack of an integrated approach. Policies set up to fight urban sprawl led to



Le Mont Royal in Montreal, a cultural landscape in an urban area

high density redevelopment of individual sites which caused the loss of gardens, historic buildings and vistas to and from the mountain. Current protection measures are focusing on the architectural design of individual projects and are not paying attention to the overall landscape or cultural impacts. Overlapping, often conflicting public agencies create confusion and non-protection in many of the site's areas as well as a lack of sharing knowledge on conservation or maintenance practice, a fact revealed during the 1998 Ice Storm. The presence of large institutions (hospitals, universities, religious institutions) adds pressure for parking and buildings on the site. Finally, the complex reality of the site is its strength but also a liability as it encourages decision-makers to focus on isolated, easy-to-grasp issues.

Potential for solution:

The mountain historically enjoyed a strong popular support that translated into 150 years of citizens' involvement in its preservation. In 1986, existing organisations and citizens founded an NGO network – Les Amis de la Montagne – to give a permanent and unified voice for the mountain, and help co-ordinate civic efforts. Les Amis established a base for monitoring of the site's cultural and natural heritage. Bridging over municipal boundaries and competitions, the group fund-raised to help recovery after the 1998 ice-storm and prepares the collective drafting of a Charter for the Mountain to set common ethical and operational principles for the great range of institutions and authorities. Such public statement charter, freely agreed upon by stakeholders and players as a reference for their own work, could be a solution for similar sites around the world.

Case Study 4 – Solutions for Religious Heritage: Quebec's Religious Heritage Foundation

Context:

Religious heritage is a distinctive part of Quebec's cultural heritage as religion played an important role in the history of the land, from the arrival of the first French explorers in the 17th century. Quebec is one of the few places where strong Catholicism and Protestantism met. Their religious competition was expressed through architecture and art, leaving a considerable cultural heritage to which are added the places of worship of other traditions which came with immigration.

Risks:

- Abandonment – Movements of population to improve their economic or social standard and a general ageing in Quebec, created a trend of the slow disappearance of once thriving religious orders or congregations. This, added to a fall in religious practice, creates a risk of desertion for these heritage places of worship, convents, monasteries or cemeteries and the dispersion of the artworks, furniture and other objects.
- Structural deterioration – The cold Canadian climate imposes severe conditions on these heritage places. It affects the durability of their features (towers, roofs, stained glass, organs, interior finishes) and makes the operation of such buildings

quite costly. These conditions force many communities to choose either to maintain their building or to heat it for services.

Response:

- Co-ordination between the different traditions -The Catholic, Protestant and Jewish community representatives agreed they shared common problems and were equally interested in preserving the heritage of their tradition. They established a common set of principles and a joint assessment of needs. This co-operation started in the Montreal area and was expanded to the whole of Quebec leading to the establishment, in 1995, of the Quebec Religious Heritage Foundation which received a large grant from the Ministère de la Culture du Québec. The grant programme not only covers repairs to buildings and organs, but also some types of artwork conservation. Grant money has been matched by private donations to cover the costs.
- Co-operation for conservation – The Foundation is one of the few institutions of that sort around the world to officially recognise ICOMOS principles. It operates on the basis of regional forums formed of representatives from the various tra-

One of the totem poles on Anthony Island, supported by a metal bar



ditions participating in the program. These forums enable parish administrators and governmental officials to identify together the funding priorities for their region. Hundreds of projects have been implemented in that context. The Foundation is now working with ICOMOS Canada to define a set of operational guidelines for managers, architects or craftsmen receiving funds.

- Research of new uses – Changing use for churches or sacred places has proven to be a major risk. The Government of Quebec and the Foundation, anticipating that a large number of such buildings will become redundant over the next few years, established a special grant program to help find acceptable new uses and preserve as much of the heritage values in that context.

Case Study 5 – Totem Poles on Anthony Island (Kungit Island)

In a bay on the southern tip of Anthony Island, which is part of the Queen Charlotte Islands, off the west coast of British Columbia are the ruins of the wooden structures of Ninistints village, formerly belonging to the Haida-Gwaii Indians. This historic village, which was abandoned in 1890, has been on the World Heritage List since 1981. Only small fragments of the very solidly built wooden framework and just a small group of the totem poles, which originally stood in front of the houses and marked the power of the Indian chiefs, have survived. The decay of the totem poles, which were re-erected time and again in past centuries, was not stopped for religious reasons, a pro-

cess that is still respected by the modern Haida. Therefore, these unique testimonies will gradually disappear. The erection of new totem poles, which in Canada can also be seen in museums, is taught in newly founded wood carving schools (one of the most famous artists in this field being Bill Reed).

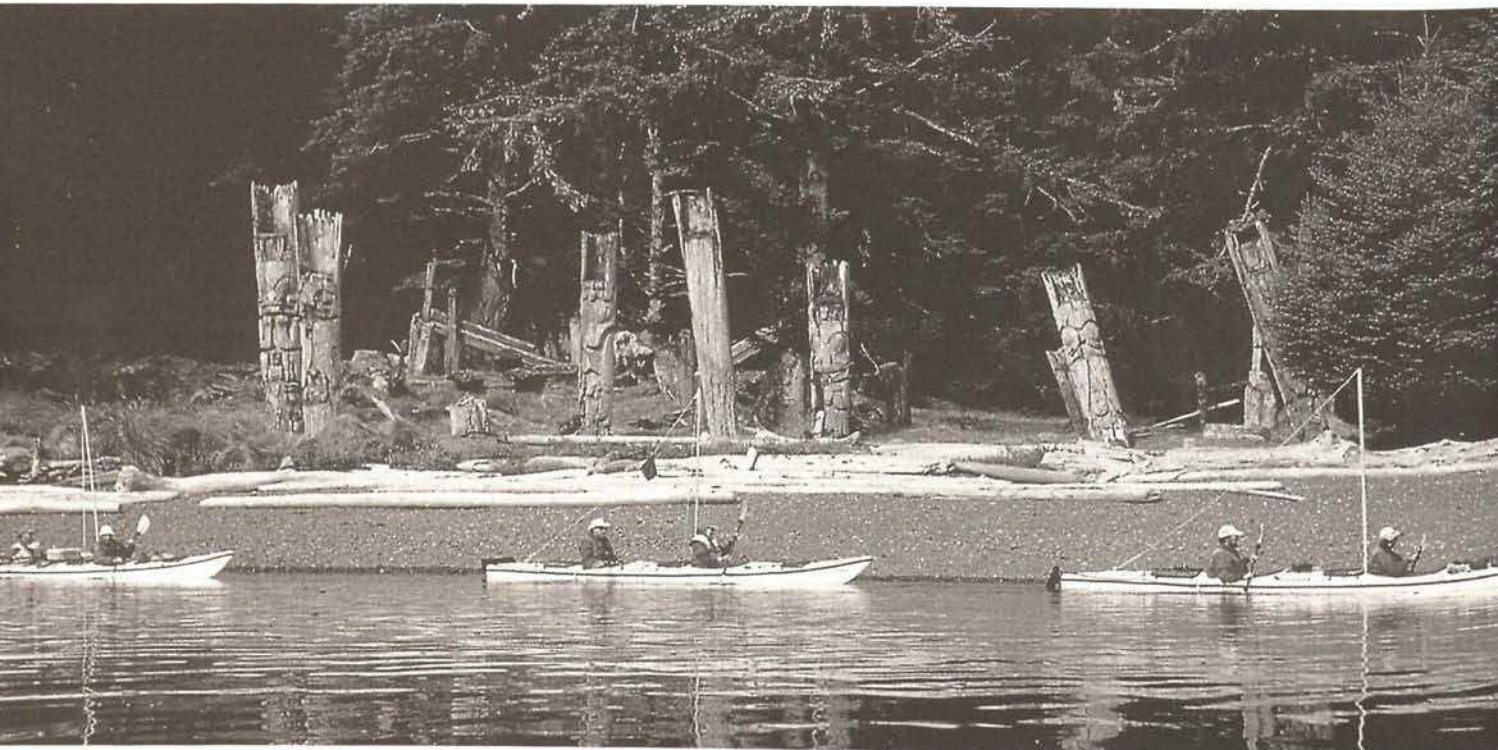
Case Study 6 – Alleviating the threats to a ship : Elizabeth and Mary

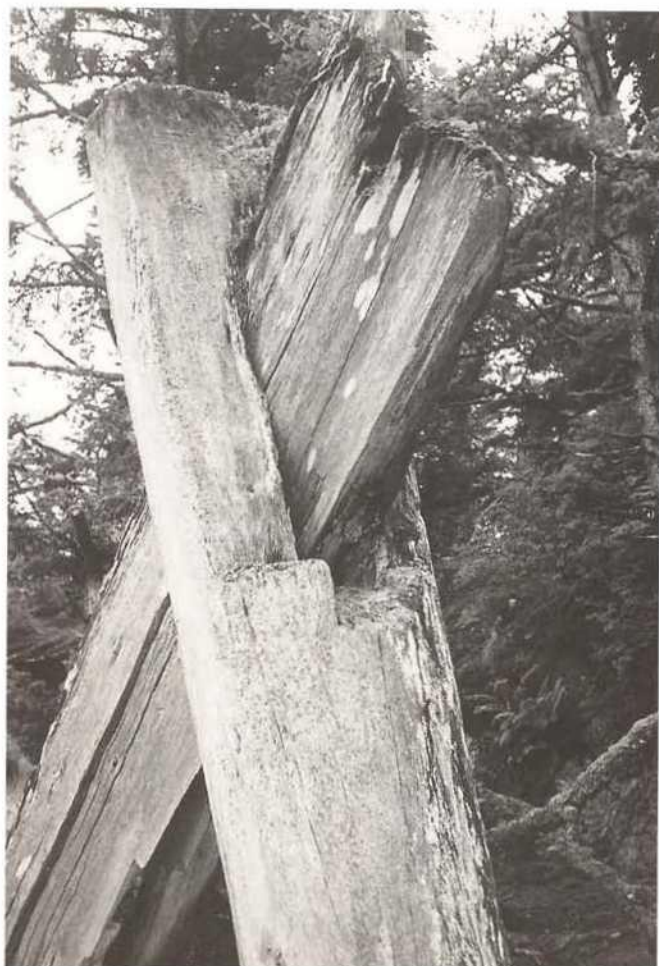
Discovered in 1994, the bark Elizabeth and Mary was situated in l'Anse aux Bouleaux near the small town of Baie Trinité along the north shore of the Gulf of St. Lawrence in the province of Québec, Canada. The vessel was part of an 1690 invasion fleet of New England militia, led by Sir William Phips, sent to capture Québec. The invasion miscarried and several vessels, including this one, were wrecked along the coasts of Canada during the return voyage. The 1690 siege of Québec was one of the most important events in the history of New France and has significance for the development of Canada.

Heritage Value:

The Elizabeth and Mary has recently been declared a National Historic Site by the Historic Sites and Monuments Board of Canada. Through a study of the hull remains of this earliest documented New England-built vessel, the poorly understood topic of colonial shipbuilding practices will be more fully elucidated. Further, the well-preserved collection of militia firearms, munitions, accoutrements and domestic artifacts is unparalleled in North America for this period.

The totem poles on Anthony Island





Remains of the Indian village near the totem poles



Severely weathered remains of a totem pole on Anthony Island

Understanding Heritage Value:

Following its discovery, the site was surveyed in 1995 then completely excavated during 1996 and 1997. This included the dismantling and raising of the extant hull structure. The detailed research and analyses of both the hull remains and extensive artifact collection is ongoing. Avocational divers trained by Parks Canada to become shipwreck protectors and agents were involved in the excavation and are now monitoring the site. Public awareness was raised very well through the roles of both the professionals and the avocationalists.

Threats to Heritage Value:

The threats to the site provided the impetus for complete excavation. The site, located in very shallow water (less than 2 meters) very near the shore, was particularly vulnerable to storms and winter ice action. In fact, the discovery of the site was due to its uncovering by a particularly vicious winter storm. Looting

of the site was also considered to be a real possibility, especially in view of legislative problems in Canada regarding heritage wreck protection. Given the significance of the site, total excavation was seen as the only option to preserving the resource for future generations.

Conservation Strategies:

Through a cost sharing agreement between the Province of Québec and the Canadian Federal Government, the artifacts from the site have undergone or are undergoing complete conservation treatments. The recovered timbers of the hull have been completely re-buried in a fresh water lake near the original site and are subjected to conservation monitoring to ensure their long term survival.

(See National Geographic Magazine, August 2000, English and French editions.)