

# **The Concept of the Louisbourg Underwater Museum'**

**Robert Grenier**

## **Introduction**

Parks Canada, part of the federal Department of Canadian Heritage, has been involved in managing the country's submerged marine heritage for more than thirty years. Its role expanded in 1961 when, in an effort to protect a number of historic wrecks of French navy vessels in Louisbourg harbour from the eighteenth-century wars between France and Britain, it claimed ownership. With the co-operation of the harbour authorities (under another federal department), Parks Canada prohibited unauthorized diving. For the next three decades these wrecks remained intact and became the jewels of national submerged heritage management and protection efforts. As successful as this approach has been, however, it is just one of five concepts used by Parks Canada to manage historic wrecks.

## **Management Concept 1: No Intervention**

In this scenario, sites are left alone and no inventory or archaeological work is undertaken. Access may be either allowed or prohibited.

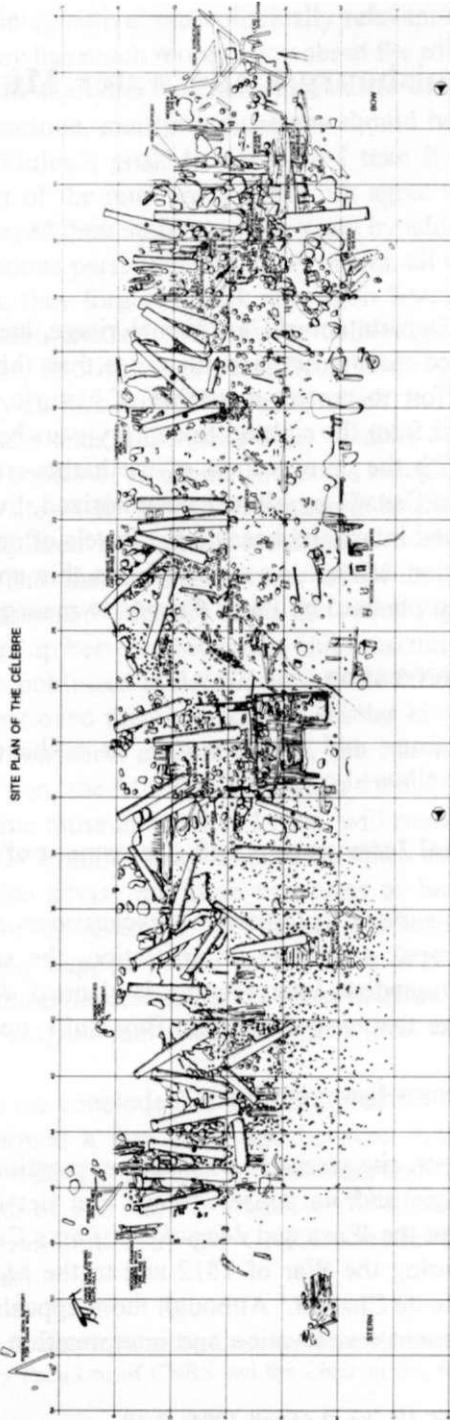
## **Management Concept 2: Minimal Intervention and Assessment of Potential**

This option involves non-intrusive surveys or limited test excavations. A detailed plan of surface deposits is generally prepared; to ensure its protection, the site is sealed with sandbags or by other means. No immediate interpretation is planned. An example is the site of the *Saphire*, a British frigate that sank in 1696 in Bay Bulls, near St. John's.<sup>2</sup>

## **Management Concept 3: Maximum Intervention**

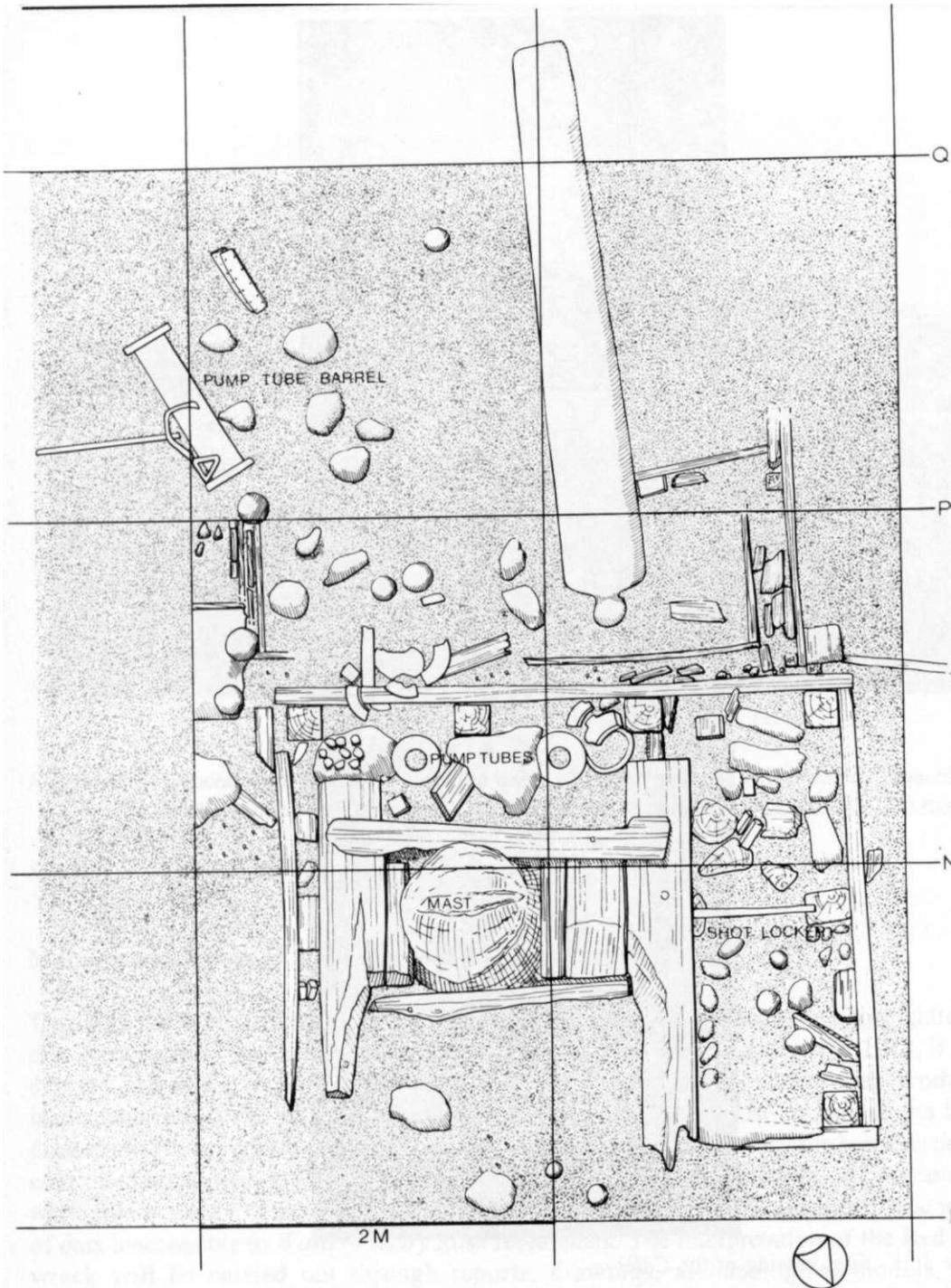
This option consists of systematic on-site research, complete excavation (including total or partial recovery of the structure and its conservation), and detailed analysis and interpretation. Typical examples are the *Wasa* and *Mary Rose*. Parks Canada has applied this scenario to a gunboat sunk during the War of 1812 and to the *Machault*, a French frigate that sank in 1760 in the Baie de Chaleur.<sup>3</sup> Although more appealing to the general public, this approach entails exorbitant conservation and interpretation costs.

*The Northern Mariner/Le Marin du nord*, IV, No. 2 (April 1994), 3-10.



*Figure 1:* Site plan of the *Célèbre* provided as a road map for the divers.

*Source:* Carol Piper, Parks Canada.



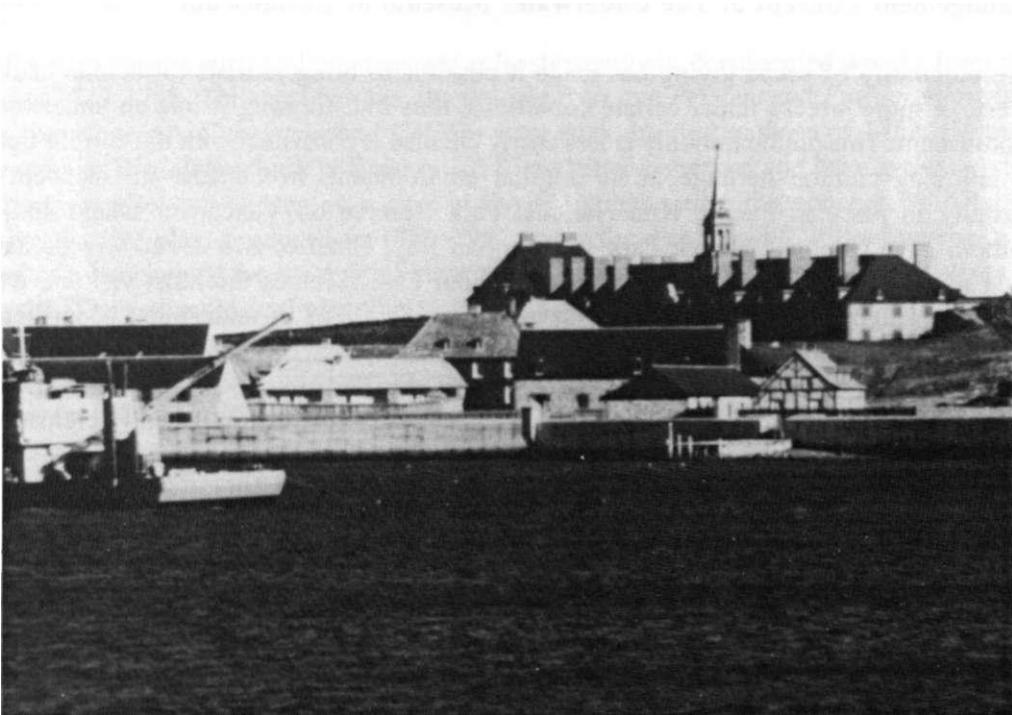
**Figure 2:** Detail of the central area of the *Célèbre*.

**Source:** See figure 1.



*Figure 3:* Site drawing of the *Cèlebre*.

*Source:* See figure 1.



**Figure 4:** General view of the site with the barge of Parks Canada's Underwater Archaeology Section in the foreground and the reconstructed buildings of Louis XV's fortress.

**Source:** Denis Page, Parks Canada.

#### **Management Concept 4: Comprehensive Recovery**

This was the option used at the site of the sixteenth-century Basque whaling galleons discovered at Red Bay, Labrador.<sup>4</sup> After the discovery of the first galleon in 1978, it was decided to avoid the colossal cost of treating the ships' timbers, which often produces inadequate results (as with the *Wasa*). Instead, Parks Canada chose to expose the hull, disassemble it, bring it to the surface to record all data, and then rebury the sections under controlled conditions in an anaerobic environment. Through this excavation program we were able not only to save millions of dollars but also to collect a considerable amount of data inaccessible to *Wasa* or *Mary Rose* researchers. The interpretation of the Red Bay wreck will be carried out through reports, drawings, archaeological models, and audiovisual means, making it possible to bring to light much new information on sixteenth-century naval construction on the Iberian peninsula.

### **Management Concept 5: The Underwater Museum or Ecomuseum**

The popularity of scuba diving has made it possible to bring tourists to the site of one wreck or more wrecks under certain conditions, thus transforming it into an underwater ecomuseum. This option not only is less costly but also is consistent with the current trend of enjoying cultural heritage in its original environment. In Canada, this concept is partially in place in Pacific Rim National Park Reserve on Vancouver Island and in Fathom Five National Marine Park in Georgian Bay, Ontario; two dozen wrecks have been made accessible to visitors in each. Fathom Five receives the most visitors, with more than 50,000 dives every year. But the best example of an underwater ecomuseum is found at a site not actually part of the Parks Canada system. Louisbourg harbour is just a few hundred metres outside the boundaries of the Fortress of Louisbourg National Historic Site. Louisbourg was a major commercial centre founded in the early eighteenth century.

#### **Louisbourg Underwater Museum**

Management of the historic wrecks in Louisbourg harbour may be divided into two separate stages. The first stage, stretching from 1961 to 1985, followed the second concept: a partial inventory of the sites and the establishment of a protection system that for a few years permitted dives organized by a local entrepreneur approved by Parks Canada and funded by a Crown corporation. During this period several relatively informal inspections were carried out by Parks Canada's Marine Archaeology Section. The concept of underwater museum management was further developed and translated into practice in 1986, following a request from the Fortress of Louisbourg superintendent. The aim was to allow divers access to Canada's submerged marine heritage in a manner consistent with Parks Canada's principles of cultural resource management, which include recognition of historic value, protection for present and future generations, promotion of real understanding of the resource, respect for its historic character, and respect for the integrity of the site.

This latter concept led to a partnership between two federal departments and the private sector. The Department of Transport, responsible for the Canadian Coast Guard, has jurisdiction over nautical activities in the harbour. At the request of Parks Canada, the wrecks' custodian on behalf of the Crown, it has controlled diving since 1961. Transport Canada now grants operating permits to local entrepreneurs who, provided they comply with park directives, receive permission to take paying divers to authorized sites. Parks Canada, the manager of the wrecks, has inventoried the sites, assessed their significance and capacity to withstand the effects of multiple visits, and drafted recommendations and directives.<sup>5</sup> Parks Canada also developed an annual site inspection program to assess any damage or signs of deterioration, and is responsible for advising the harbour master on the selection and qualifications of prospective entrepreneurs and on granting or revoking permits.

## **Louisbourg Sites**

In the harbour and surrounding areas are at least twenty-six documented wrecks from the period 1713-1758. The most famous, the seventy-four gun *Prudent* and *Entreprenant*, and the sixty-four gun *Capricieux* and *Célèbre* were sunk during the siege of 1758. Because the remains of *Célèbre*, built in Brest in 1755, are better preserved and have greater visual impact, its site was chosen as a case study in implementing the concept. A detailed archaeological plan, produced in 1986-1987 under the direction of Willis Stevens, was used as a benchmark for the annual inspections required to assess the impact of visits to the site. The archaeological plan thus became a management tool, and it was subsequently modified slightly for use as an interpretation tool as well. Once the site's significant features were identified, the plan was printed on water-resistant paper for use as a divers' guide. In 1986 and 1987 we also made casts to better detect changes to the wreck. These became benchmarks to monitor minute changes on key timbers. We also developed techniques for removing kelp without damaging the wreck; if this were not done, divers would be unable to see it. Finally, we plan to install a system of anodes on the cannons to provide cathodic protection to slow their natural deterioration, visible through the oxygen bubbles escaping from them.

## **Guidelines**

Eleven guidelines were issued for dive tour operators. The most important make the operator responsible for installing a permanent mooring system that will not threaten the security of the wreck or the divers; for accompanying the divers (never more than four); for providing the names and addresses of all divers to park authorities; for clearing the site (if necessary) of excess kelp; and for any accidental or intentional damage to the wreck or the site, which must be reported to the chief park warden. Divers, on the other hand, are required to stay at least three metres above the site; to maintain visual contact with the operator at all times; and to refrain from grabbing or pulling out kelp attached to the wreck and to avoid touching or otherwise disturbing any object at the site.

## **Interpretation Tools**

To enable divers to make the most of their visits, the Marine Archaeology Section has produced two documents. The first, a twelve-minute videocassette, provides information on the site's historic context and fragility; on how divers can help to preserve the wreck for future generations; and on the key features that will help to understand the site better. The videocassette is also used to introduce the site to non-diving visitors. The second is a guide printed on water-resistant paper that identifies the important features. Divers can make their own notes on this map and can keep it as a souvenir.

## Conclusion

Over thirty years of protecting *Célèbre* and other nearby wrecks have provided irrefutable evidence that only sound management can ensure the longevity of these irreplaceable and non-renewable marine heritage resources. The pillaging of dozens of important wrecks not far from Louisbourg further underscores this lesson and testifies to its success. The Louisbourg ecomuseum allows Canadians, heirs to this heritage, to become partners both in fighting for its survival and in understanding and disseminating this living chapter of history at minimal cost to taxpayers. The concept of an underwater museum has many possibilities, but unfortunately cannot be applied everywhere. At Louisbourg all the circumstances have come together to promote success.

## NOTES

\* Robert Grenier is Chief, Marine Archaeology, Archaeological Research Branch, Parks Canada. A member of the Editorial Board of *The Northern Mariner/Le Marin du nord*, he is perhaps best known for his work on the wreck of a sixteenth-century basque whaler at Red Bay, Labrador.

1. An earlier version of this paper appeared under the title "Le concept du musée sous le mer de Louisbourg," *Actes des Colloques de la Direction du Patrimoine: Le patrimoine maritime et fluvial* (Paris, 1993), 397-401.

2. V. Myles, "Artifacts from the 17th-Century Wreck of the *Saphire*, Bay Bulls, Newfoundland" (unpublished mss., Parks Canada, 1992).

3. W. Zacharchuk and P.J.A. Waddell, *The Excavation of the "Machault," An 18th-Century Frigate* (Ottawa, 1986); D. Bryce, *Weaponry from the "Machault," An 18th-Century French Frigate* (Ottawa, 1984).

4. R. Grenier and J. Tuck, *Red Bay, Labrador: World Whaling Capital 1550-1600* (St. John's, 1988); Grenier, "Basque Whalers in the New World: The Red Bay Wrecks," in George Bass (ed.), *Ships and Shipwrecks of the Americas* (London, 1988), 69-84; P.J.A. Waddell, "The Disassembly of a 16th-Century Galleon," *International Journal of Nautical Archaeology*, XV, No. 2 (1986), 137-148; Waddell, "Reburial of a 16th-century Galleon," in Oceans '88, *Proceedings* (Washington, DC, 1988), 833-836.

5. W. Stevens, "1986 Underwater Survey at Louisbourg" (unpublished mss., Parks Canada, 1987); H. Unglik, "Corrosion and Preservation of Metal Artifacts from a French Shipwreck Sunk at Louisbourg Harbour before 1758" (unpublished mss., Parks Canada, 1988); L.D.M. Murdock and T.W. Daley, "Conservation Environment and Preservation Assessment of the Louisbourg Wreck Site" (unpublished mss., Parks Canada, 1989); L. Laflèche, "Wood Degradation Study from the New Wreck, Louisbourg" (unpublished mss., Parks Canada, 1990).