

## Underwater Archaeology and the Future of Submerged Cultural Resources on the Trent-Severn Waterway

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*Work is beginning on a comprehensive inventory of submerged archaeological resources along the Trent-Severn Waterway National Historic Site of Canada. This paper describes the development pressures and attendant cultural resource management issues that arise in trying to protect sites and mitigate threats.*

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Underwater Archaeological Services (UAS), Parks Canada, is responsible for the inventory and assessment of submerged cultural resources on lands owned or managed by Parks Canada. This mandate encompasses the submerged lands in all National Parks, National Historic Sites, National Marine Conservation Areas and Historic Canals throughout the country. UAS has nine full time employees and is the only federal, underwater archaeology team in Canada. Currently, the unit is in the early stages of a multi-year, submerged cultural resource inventory of the Trent-Severn Waterway (TSW) National Historic Site of Canada. The submerged lands of the TSW are owned by Parks Canada, with the exceptions of Lake Simcoe and Lake Couchiching, which fall under the jurisdiction of the Province of Ontario. The cultural resources located on these lands are managed in accordance with Parks Canada's, *Cultural Resource Management Policy*. This policy outlines Parks Canada's principles of cultural resource management, the process of resource management, and provides guidelines to ensure the protection of these valuable resources.

The Trent-Severn is more than 386 km long, extending from Trenton on Lake Ontario to Port Severn on Georgian Bay. The numerous lakes and river systems combine for the largest National Historic Site in Canada, and the submerged lands rival the largest National Parks in terms of their size. The waterway includes 36 conventional locks, two hydraulic lift locks, two flight locks and a marine railway, and is often referred to as Canada's premier vacation land, with upwards of 2.5 million visitors each year. As

a result of the large number of visitors and the increasing demand for waterfront, retirement property, the TSW is currently experiencing a tremendous amount of development pressure. Its shorelines, and consequently many of its submerged archaeological resources, are now under serious threat. To meet this threat, Underwater Archaeological Services was requested to compile a resource inventory of archaeological sites underwater. Archaeological resources are defined as the submerged remains of human activity. Most often these remains are represented by lithic artifacts, shipwrecks, wharves, bridges or dam structures, and modern debris.

Most development proposals, whether in the form of condominiums, golf courses or residential housing, include some type of dock construction that requires an "application to build" from the TSW. From the perspective of submerged cultural resource management, the dock itself is not a major concern. There are many acceptable dock designs that will not impact on cultural resources. However, dock construction inevitably is followed by propeller wash, which can destroy an archaeological site in minutes. Therefore, before an application for dock construction is approved on a known archaeological site, mitigation must be carried out. It is important to emphasize that, while it is the responsibility of the TSW to inventory the lands it manages, it the responsibility of the proponent/developer to mitigate the impact to archaeological resources determined to be under threat from the development proposal. Before such mitigation can take place, an archaeological permit application that outlines the proposed work must be approved by the TSW.

One of the first steps in the practice of cultural resource management is the establishment of a resource inventory. The inventory determines the extent of the resource base and provides the basic framework for evaluating “historic value”. The inventory is established through a research design that may incorporate documentary research, oral history, photographic analysis, etc., as well as any number of marine archaeological survey techniques, such as free-swimming, towed searches, or remote sensing. Underwater archaeological survey, at this stage, implies non-destructive techniques; nothing is removed other than information. The objective is to find and precisely locate submerged cultural resources. Once located, there is an improved ability to protect and present the resource. The inventory of underwater resources can be a costly and time-consuming project and should in all cases be preceded by archival research or other appropriate research methodologies. Compiling an inventory can take a variety of forms, from a preliminary reconnaissance of known or selected submerged sites to a systematic, comprehensive investigation of all bodies of water. Nevertheless, it is understood that such an inventory does have limitations. Non-destructive techniques only reveal that which is visible and it is impossible—and in most cases neither practical nor feasible—to inventory all resources.

The TSW inventory at this stage of our research does not include site assessment analyses. The objective is to identify site locations for the purpose of cultural resource management. The significance of a cultural resource, under Parks Canada policy, is not a determining factor with regard to the protection of cultural resources. If the site is threatened by development, the assessment analysis will be funded through the mitigation process, which, as mentioned earlier, is the responsibility of the proponent/developer.

The TSW has a long and varied representation of human history, dating back to at least 9,000 B.C., which is characterized by artifacts from shipwrecks to Archaic projectile points and even earlier materials. The nineteenth-century Mossom Boyd lumbering enterprise, headquartered in

Bobcaygeon, provides one example of the type of historic resources one can expect to encounter. The Boyd steamer fleet consisted of a number of tugs and barges used primarily for the transportation of lumber. Many of these vessels were abandoned at their last destination. For example, the “Ways” at Bobcaygeon was a Boyd ship-refitting yard, complete with a marine railway. Today, the bottom of an abandoned steamer can be seen in Little Bob Channel, with its bow pushed up onshore at the “Ways”. The remains are those of a side-wheeler, measuring approximately 100 feet long. Although the name of this vessel may never be known, it is important to record and preserve its structural intricacies, as there is no known archive of plans or construction details. Though the vessel may be abandoned and forgotten, its history and legacy will live on through the archaeological record.

The excursion steamer was also a familiar site along the waterway. Throughout the second half of the nineteenth century and the first part of the twentieth century, picnic excursions were important social events. Hundreds of persons, transported by steamer and barge, complete with brass band entertainment, would gather at well-known locations for a day of fun and festivities. One of these steamers was the *Anglo Saxon*, which made the run from Port Perry to Lindsay. In 1894, the *Anglo Saxon* was scuttled in Cameron Lake, where it still lies, sitting upright on its keel. Although it is missing much of its super structure and its hull is on the verge of collapse, this vessel represents one of best preserved, last remaining examples of this by gone era.

While there is no lack of historic resources to document, by far the greater number of the TSW’s submerged cultural resources are those representing the cultural history of the region’s First Nations. To date, three major site locations have been identified: Boyd Island on Pigeon Lake, Gannon Narrows between Pigeon and Buckhorn lakes and White’s Island on Rice Lake. These areas were specifically targeted for surveys due to the potential impact from proposed onshore development projects. Although none of these projects has plans for direct intervention onto submerged lands, any project that has the

potential to impact the shoreline is of concern to the TSW. The more obvious concerns are related to the protection of submerged cultural resources, the destruction of fish habitat and shoreline erosion. However, from an overall management perspective, maintaining the ecological integrity of the entire waterway, through sustainable resource management practices, is a primary goal of the TSW management team.

Archaeological investigation at all three sites has identified a First Nations cultural history representative of the Archaic period through to the Late Woodland period, not to mention the historic period artifacts. All sites are primarily submerged lands created by the construction of the dams and locks that make up the TSW. Some of the more diagnostic artifacts include a polished slate point, a broad point and ceramic rim sherds. One of the more interesting and puzzling finds came from Rice Lake, with what appears to be a limestone carving in the form of a turtle.

In addition to the site discoveries, there were also a number of isolated finds including the remains of three ceramic pots, one of which was only about 10 cm tall and is complete. This vessel, recovered at Burleigh Falls by a local diver, dates between A.D. 1100 and 1300. It was not embedded in the bottom. Rather it was sitting on top of a mobile silt layer and probably represents a secondary deposition resulting from an erosional event. The pot has been inventoried in the Parks Canada collections and is on loan to the Peterborough Centennial Museum and Archives.

The inventory of submerged cultural resources on the Trent-Severn Waterway will take many years to complete. The overall objective is to create a geographic information system (GIS) that will allow resource managers easy access to site location data as well as historical maps, photos and the complete archaeological record. It is understood that such an inventory cannot be completed in isolation from the diving public, local residents, First Nations and the archaeological research community. To this end, Marine Archaeological Services hopes to continue to draw on the expertise and knowledge of many persons familiar with the history and heritage of the Waterway. Education was one of our first initiatives. In December 1999, a Nautical Archaeology Society (NAS) Level I training course was delivered to a group of 17 divers. This course introduced the principles and ethics of professional archaeology and provided instruction on basic underwater mapping techniques. Public lectures, meetings with First Nation Elders, institutional partnerships and scholarly presentations at archaeological conferences have all contributed to promoting the protection and presentation of these often forgotten cultural resources. The old adage, "out of sight out of mind", has been well practised on the TSW in the past. With open communications, viable partnerships and a clear understanding of our common goal, the TSW is well positioned for a future of well-founded, sustainable heritage management.

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