Atherley Narrows Fish Weirs

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During the fall of 1615, the French explorer Samuel de Champlain, in the company of a Huron raiding party, passed near the small narrows separating Lake Couchiching and Lake Simcoe in southern Ontario, Canada. In his journal he noted that the Huron, using a number of weirs, caught large quantities of fish that they preserved for winter. Consisting of closely spaced stakes driven into the bottom, perhaps with interlaced material, and extending almost completely across the narrows, the weir directed fish to small openings where they were captured with nets. Champlain's account remains one of the very few early references to native fish weir technology in this part of North America but only depicts the final years of a very ancient site. Some 5,000 years ago, when construction on the Great Pyramid at Giza was commencing, the first fish weirs were being installed at Atherley Narrows. Following the dispersal of the Huron in the 1650s, the weir fishery at the narrows appears to have been discontinued. The Ojibway peoples who moved into the abandoned area, although aware of the existence and function of the weirs, never took up their use. Following Champlain's brief account, the fish weirs at Atherley Narrows fade into relative obscurity and serious study of the site has been a relatively recent development.

Work in the 1960s and 1970s by the Royal Ontario Museum and, more importantly, by Trent University, brought to light the richness of the resource as well as its antiquity. This research led to the narrows being declared a National Historic Site in 1982. Atherley Narrows, located near the present town of Orillia, Ontario, is part of the historic Trent-Severn Waterway and is administered by the Parks Canada Agency. In 1988, as part of a Parks Canada exercise, the site was identified as a threatened resource and Parks Canada's Underwater Archaeology Services were called in to undertake an assessment of the site. Threat to the site came in the form of increased recreational boating traffic, new condominium and marina development as well as sport fishing activity.

The results of a number of years of survey were less than encouraging. All of the areas where weir stake alignments had originally been located had undergone significant change. Where hundreds of closely spaced stakes in aligned patterns were expected, only a very few, generally widely spaced stakes were seen protruding above the bottom. To the archaeologists, it was obvious that the stakes were being extracted or sheared off in some manner. Judging by the amount of fishing line wrapped around many of the remaining stakes and fishing lures actually embedded in the stakes, sport fishing activity appeared to be the main culprit. Contributory causes seemed to be boat anchoring, marina dredging and propeller wash from high speed boating. To mitigate these

impacts, Parks Canada embarked on an education program and instituted no-anchoring and no-wake zones at the site.

During the 1990s, Parks Canada became aware of a plan to build a second bridge parallel to the existing highway bridge over the narrows. Plans called for the new bridge to pass directly over a significant stake structure on one side of the narrows and concern for the protection of this feature during construction was expressed. The survey revealed that this stake feature was actively deteriorating. Water currents were slowly exposing and loosening the stakes and the sandblasting effect of water-borne particles was highly degrading the exposed portions of the stakes. By far the most serious threat, however, came from fishing activity. Rather than allow this feature to degrade further, Parks Canada recommended excavation and removal of the stakes to recover as much information as possible. This brought the local aboriginal band into the consultation phase.

The local Chippewas, although never users of the fish weirs, nevertheless deeply value their traditional role as stewards of the weirs. To them, Atherley Narrows was much more than a fishing place. It was a traditional meeting place for Aboriginal nations: a place for treaties, trade, festivities and spiritual ceremonies. Due to this, the Chippewas felt they had a considerable role to play in any decision making process concerning the weir site, a hidden but important component of their cultural landscape.

Consultations, involving interested parties, eventually evolved into a more formal collaborative organization, Fish Fence Circle. This group, composed of representatives of the Chippewas, local municipal governments and historical associations, residents of the area and Parks Canada, and through open and respectful discussions, approved and oversaw the excavation of the stake feature beneath the bridge. The removed stakes were conserved and radiocarbon dating of a few of these revealed that they were some of the more recent from the site. The work of the Fish Fence Circle continues today both on the educational front and arriving at recommendations balancing the use of the area with preservation of the national historic site.

Parks Canada's focus at Atherley Narrows is now on periodic monitoring of the cultural resources with a view towards understanding and mitigating the adverse impacts. The monitoring plan looks at both the natural and cultural aspects of the threats. On the natural side, conservation assessments establish the actual physical condition of the stakes, current meters track the magnitude of the current flow over the site and other measuring devices monitor the rates of sedimentation relating to the burial of stakes. Cultural impacts are monitored by the precise plotting and tagging of numerous stakes providing a means of quantifying resource destruction. The goal is to ensure the viability of this rare, important, enduring and intriguing Aboriginal fishing site.



Figure 1: A diver observing an alignment of stakes at the Atherley Narrows Fish Weir site; note the fishing lures entangled in the stakes (Peter Waddell/Parks Canada Agency)



Figure 2: Archaeologist mapping stakes at Atherley Narrows (Nick Van Vliet/Parks Canada Agency)



Figure 3: A diver photographing possible weir stakes (Peter Waddell/Parks Canada Agency)