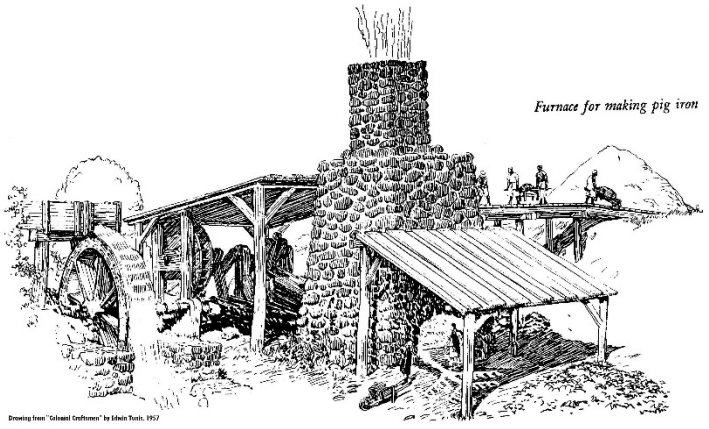

ARCHAEOLOGY AT

LANSDOWNE IRON WORKS

NATIONAL HISTORIC SITE

Archaeology Wrap-Up 2018

Dear Supporters;

The 2018 dig has concluded. As expected, it was centered on the west bank of the river, opposite the designated historic place of the Lansdowne Iron Works National Historic Site. This was mostly because Parks Canada resists including the west bank in the National Historic Site, for lack of evidence, in their minds, that iron working activity went on there. We feel confident that the evidence we found will overcome any doubt about the bloomery being on the west bank.

This year, the dig was moved up a week to avoid the conflict with Turkey Fair preparations, as we encountered last year. We started on Monday Aug 27 for six working days, finishing on Tuesday Sept 4 after the Labour Day long weekend. The volunteers were many and enthusiastic, numbering 10 or 11 each day in the field and 6 or 7 in the lab, in addition to 5 staff members from Past Recovery Archaeological Services. About three weeks prior to the dig, Jack Harvey, Dave Johnson, and myself investigated the mill pond by casting with powerful magnets from a boat. We found iron residue the size of grains of sand, up to small pebbles, including a nugget of once-moulten iron similar to the one John Light found in 2001.

As on the east bank, there has been 200 years of industrial construction and activity since 1811, when the iron works burned. Knowing that the overburden would be deep, we were delighted with the offer by Brent Tye, who donated the services of his excavator to get us down to the strata of 1811 quickly. He dug pits inside and outside the 1897 saw mill foundation. The pit inside revealed that there was no remaining wreckage from the mill machinery, and the floor of the basement of the saw mill was bedrock, littered with the same huge chunks of granite that we find everywhere on both sides of the river. We also determined that the poured concrete foundation walls of the saw mill are founded on bedrock and could be reused to construct a pavilion in which to interpret the iron works and the subsequent mills, which were so important to the village.

Our assumption throughout, was that the iron works buildings would have been in the same location as the later mills, to take advantage of the water power. Two machine-dug trenches and one hand dug pit inside the mill foundations did not reveal any clues to the location of the bloomery and forge. A stone wall which

crossed the foundation of the grist mill at a shallow angle, and appeared to be either loose laid, or else old enough that the mortar had leeched out completely, gave us hope that it was a remnant of either the 1800 forge or the 1865 shingle mill, but excavation revealed it was probably of more recent origin and loose laid.

A trench outside the foundations at the upper level, was more productive. There we found a thick layer of tree bark, believed to be cedar, which could date from the shingle mill period, and below that, on the bedrock, the residue of a

charcoal pile in which there was a post hole. We interpret it to be the remains of a shelter for charcoal, from the iron works period, which is in keeping with the fact that the west bank was part of the “Furnace Yard” as described in a mortgage from 1805.

Four test pits nearby yielded nothing older than the remains of an unidentified electrical device from the 1912 to 1929 period, when hydro power was generated in the grist mill.

Five pits, down near water level on the south side of the site, were the most productive. Access was via a rope, for security in descending and ascending the steep loose incline from the upper level to water level. This has been a place to dispose of refuse ever since the iron works period, and was littered on the surface with household waste as recent as the 1960s. There we discovered slag and other residue from a smelting process, increasing as we progressed from west to east along the beach. The amount of iron remaining in some of the slag (tested with a

Formations of slag of different types from the beach area.

magnet) was enough to indicate that the process that was performed here was quite primitive in efficiency. The concentration of slag was greatest near the access rope, where it appears the river bed is composed of a high percentage of slag, with a shallow overlay of loose stones. Fallen rocks from the mill foundation, and the instability of the remaining wall above, prevented us from digging to the east of the access point, but in that area, a tailrace had been dug for the new mill in 1897, at which time much slag had been removed from the bottom of the river and deposited on top of the surrounding rocks. These samples included a large piece with strong magnetic attraction, which was identified by Darrell Markewitz, one of our volunteers who makes frequent practice of smelting iron in a primitive bloomery, as a "slag bowl" which had formed around the outside of a bloom but had not adhered to the bloom when it was extracted from the furnace. The nature and concentration of the slag in this area, indicate that a bloomery furnace existed in very close proximity, probably within the footprint of the 1897 grist mill.

The next step will be to present our newfound evidence to the Historic Sites and Monuments Board of Canada, in support of the appeal we made last year to have the designated historic place of the Iron Works enlarged to include the west bank of the river. If we can persuade them of that fact, our future archaeology should become eligible for cost sharing with Parks Canada, however, there is little hope of the decision being made before the deadline for applications for 2019, and "eligible" means only that we can compete for funding with all the other National Historic Sites.

Thank you to our loyal supporters, who donated a total of $10,250 in 2018. After the dig last year, donations continued to come in until year end, resulting in $4,050 remaining from 2017. So in round numbers, our budget for this year was $14,300, and our outlay about $13,400. Our appeal to the steel industry for corporate support, was eclipsed by the crisis resulting from tariffs imposed by the Trump administration.

Your dollars enabled us to learn a lot about the site. We found lots of positive information, which is pivotal to the interpretation of the National Historic Site, and as the archaeologist says, the "negative information" still teaches us something. Although the later mills probably covered the footprint of the forge and bloomery, there seem to be nothing remaining inside the foundations. We may have to abandon hope of finding an actual footprint on the ground, and do more

exploring outside the foundations of the later mills in search of secondary evidence.

Our strategy for next year is still in flux. There are other uncertainties, such as the continued support of our banker (the Township of Leeds & 1000 Islands), funding support from Parks Canada, and whether to return to the east bank to continue the investigation of the blast furnace. In that regard, Brent Tye thinks he can get his excavator down the slope there, to move the heavy rubble covering the spot we consider most likely.

Of course, the most important factor is the continued generosity of you, our supporters. Without you, nothing more will be revealed of this site, which is so important to the village of Lyndhurst as well as the province of Ontario. As of now, we welcome with gratitude any and all contributions to continue the archaeology into 2019.

Sincerely

Art Shaw

This piece of primitive equipment was removed from the river. It is probably part of a device to open a sluice or a turbine, from a mill prior to 1897.

Five pits down on the beach provided some of the most important discoveries.

This unidentified electrical device had field coils, and once had two armatures.

The flume (circa 1912) is accessible, leading to…

the entrance to the turbine.