

First Nations Liaison (Field Monitor) Weekly Report

Completed by: Austin Paul

Report covering the period from November 23rd- December 4th, 2015

Date: November 25th, 2015

Activities Conducted

Fish tracking on the St. John River near the McKinley ferry focusing on muskellunge.

Pertinent Tasks

- Launch the watercraft near Hart's Island and navigate upstream.
- Stop the vessel every 100 meters and drop the anchor. A hydrophone and radio receiver was used to detect tagged fish.
- No tagged fish were detected between Hart's and Sugar Island. Seeing as multiple tagged fish were pinpointed in McKinley ferry area, it was decided that we would conduct active angling for muskies later in the week.

Interests and Potential Concerns from a First Nations Perspective

Traditional resource sites: The area of focus (McKinley ferry) has always been a popular location for procuring fish resources. As was discussed in previous reports, a pre-contact archaeological site was identified in the area in the early field season of 2015. Suitable varieties of tool stone are present as cobbles along the banks of the river. The water levels were too high to allow for a pedestrian survey of the shoreline. As of yet, only one artifact has eroded out of the riverbank, a biface thinning flake (the bi-product of stone tool manufacture).

Photographs



Above: McKinley ferry earlier in the year



Above: The artifact found near McKinley ferry earlier in the year.

Date: November 26th, 2015

Activities Conducted

Vibracore sampling near Nackawic, New Brunswick.

Pertinent Tasks

- We began the day by de-icing the gear left on the boat especially the anchor ropes.
- Seeing as we would be working on large boat in the head pond, safety protocols were discussed at length.
- The Captain would navigate a vessel known as the “Sea truck” to the different study areas and the crew would deploy anchors and prepare gear.
- The Vibracore machine would be lowered into the water and pulled back up to ensure that the core was sealed tight.
- Using a crane and winch, the Vibracore would be lowered to the bottom of the head pond and would run for 2 minutes, at which time the Vibracore would be raised.
- Once raised, the core would be capped off, removed from the machine and labeled.
- The cores will be used to support various studies underway as part of the MAES Project analyzing soil stratigraphy, chemical constituents, sediment shear stress, chemical composition and density.

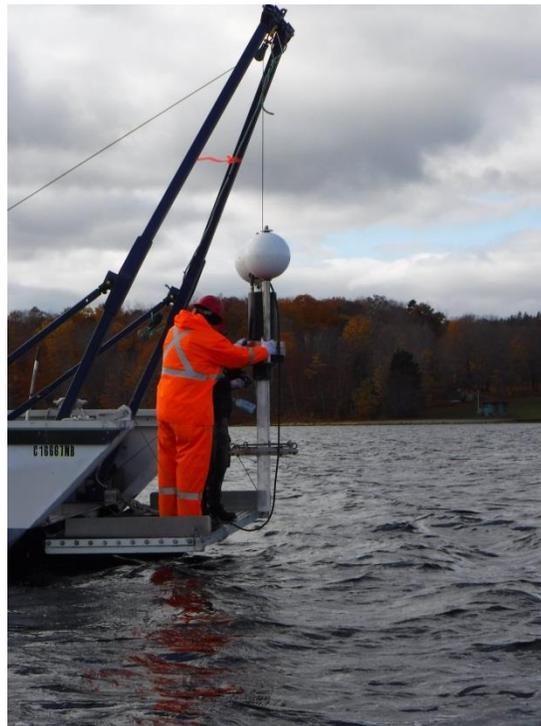
Interests and Potential Concerns from a First Nations Perspective

Traditional resource sites: As was discussed in previous reports, archaeological sites undoubtedly exist within the head pond, however, at this time the locations remain largely unknown. The mouth of the Pokiok stream would have been a popular fishing location. Pokiok falls would have been an excellent location to spear salmon and trout. If there is an archaeological site associated with the falls, it is

currently underwater. The construction of the Nackawic Bridge would have most likely impacted archaeological sites in the area. A gravel pit on the north side of the river would have been attractive as a habitation site as it would have been elevated and well-drained. The gravel pit has been heavily altered and I have not been able to find any reports focusing on the area. Below the town of Nackawic, in the Coac reach lays the submerged Bear islands. Most of the islands along the St. John are host to pre-contact archaeological sites, as such; the Bear islands are of high archaeological potential.

While conducting the Vibracore studies, I inspected every core sample for traces of archaeological material, none were found.

Photographs



Above: Preparing the Vibracore unit for sample acquisition.

Date: November 27th, 30th, December 4th, 2015

Activities Conducted

Muskellunge angling near the McKinley ferry for the purpose of tagging and tracking.

Pertinent Tasks

- Upon our arrival on site, we would organize and prepare our fishing gear. Large trolling rods were mounted to either side of the boat. Various different types of lures were used.

- We would let out line as the boat slowly patrolled the shallow areas of the river.
- Once a muskellunge was caught, it would be placed in a large cooler of fresh water and analyzed. Most of the fish that were caught already had identification and radio tags inserted into their bodies. In this case; we would record the fish's length and weight to see how much the fish had grown since first being captured.
- We did finally catch a muskie that was not already tagged. A surgery was performed to insert a radio tag. The fish was placed in a solution of fresh water, ethanol and clove oil until the fish was unresponsive to touch. The fish would then be weighed and measured. A small incision was made near the fish's belly with sterile surgical equipment and a radio tag was inserted into the cavity and stitched shut. Scale samples and a fin clipping were taken for genetic studies. An identification tag was inserted near the dorsal fin. Finally the fish was placed into a tank of fresh water to recover and subsequently released back into the river.

Interests and Potential Concerns from a First Nations Perspective

Traditional resource sites: The McKinley ferry area has already been discussed in this report, see page 1.

Photographs



Above: A 10 pound male muskellunge.



Above: A 10 pound female Muskellunge.



Above: Preparing a muskellunge for surgery.