<u>Haldimand Council Presentation – June 19, 2018</u>

By: John Benson

Subject: Haldimand-Norfolk Archeological Regional Project (HNARP)

Request: \$1,000 in funding

Goal: The goal of this regional project is to identify the extent of known and unknown chert outcrops in Haldimand County and evidence of their use from archaeological sites found over some 1000 square kilometers of agricultural lands in Haldimand and Norfolk County. Including how far the chert was transported and distributed from original chert outcrops from Haldimand County. There is archaeological evidence to support chert from Haldimand was used as part of exchange and bartering socio-economic systems by ancient people who occupied Haldimand approximately A.D.1,000 to 12,500 years ago.

Discussion: HNARP is becoming one of the largest and longest running research projects of its kind in southern Ontario. It is a 25-year project in its 12th year that involves support from approximately 200 land owners with numbers of supporting landowners continuing to increase each year.

Little is known of these ancient people and their life style, but we know they existed because of the stone artifacts made from chert rock they left behind. Advanced analytical technology can now assist archaeologists to investigate where chert rock was selected based on chemical signatures and microscopic evidence.

The study examines evidence of lifestyle behaviour through the selection of chert rock to make stone tools left behind by various groups of ancient people. These people migrated to Haldimand County on a seasonal basis for the past 12,500 years and adapted to changing landscapes and lake levels.

Flint and chert, which have similar qualities, break easily with a sharp, hard edge making these rock types invaluable to ancient people. Chert in Haldimand was mined along Haldimand creeks and streams where limestone bedrock contained chert outcrops referred to as Onondaga chert.

The scarcity of chert rock in surrounding counties of Haldimand made this an important commodity to ancient people. Archaeological evidence suggests Onondaga chert was used for exchanging and bartering amongst ancient people for other resources not always available in other regions outside Haldimand County. As a result, Onondaga chert was transported throughout Ontario, in some cases, up to 400km away from Haldimand County.

Through the collection of geologic rock samples and rock chips made from Onondaga chert a general idea on community life through the Paleo-Indian to the Woodland time periods of southern Ontario has been determined. Artifacts (or stone tools) recovered over the past 11 years have deepened the knowledge of these time periods.

This regional project and its field work has been conducted by Lorenz Bruechert, a provincially licensed archeologist and former resident of Jarvis, now residing in Vancouver, British Columbia.

The next stage in the project is submitting chert rock samples from original prehistoric mining and settlement camp sites for "chemical fingerprinting" and physical comparisons at microscopic levels.

When chert rock from original mining sites and final resting place of these stones at camp sites are analytically compared, clear cultural patterns of ancient migrations across the landscape can be determined.

Approximately 250 rock samples are to be submitted to Vancouver Petrographics (Thin-Section Analysis) and Buena Vista Labs (Geochemical Analysis) in Vancouver, British Columbia.

Lab analysis and interpretation will take approximately three years at a target cost of \$30,000.

Of this cost \$10,000 has already been collected, including a large donation by Russ Cameron, the owner of Waterford Sand & Gravel.

Deliverables: 1.) The county's donation will go directly to the laboratories. This means no middle men and lab results on chert rock samples from Haldimand will be forwarded directly to Mr. Bruechert and shared with future archeologists with similar research interests. Overall interpretation and quantitative analyses of the lab results will be shared with the Council.

- 2.) The second deliverable will be an annual update and council presentation on the previous year's discoveries / conclusions.
- 3.) The final deliverable will be the approximate 1000-page report complete with summary that will be considered a primary source of information for local museums, historians and educators alike. Haldimand's contribution ensures all citizens will have access to a report that has been private until this point.

Council's cash contribution is essential as official recognition and support for this project, which is important to Mr. Bruechert's continued work and my effort to complete the funding drive this summer.

Request: The discussion before Council is whether to direct staff to investigate the facts tabled and if verified, release funds to a maximum of \$1,000 to the laboratories.

Final Note: The tax payers of Haldimand should be aware, that although the new heritage information will be available to them, the heavy lifting in terms of cost will be carried by others.