



At last month's 31st annual Atlantic Geoscience Conference in Saint John, Nigel Selig became the first undergraduate student to win the Rupert H. MacNeill Award.

Student wins geoscience award

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CONQUERALL MILLS — A former Park View Education Centre student recently became the first undergraduate to earn top honours at the 31st annual Atlantic Geoscience Conference.

"This was the first time I have presented in front of scientists and academics. I had no expectations of getting an award," said Mount Allison University geography student Nigel Selig, who won the Rupert H. MacNeill Award on February 6 in Saint John.

His project determined the age of an historical carriage factory in Middle Sackville, New Brunswick through the use of dendroarcheology, or the science of using tree rings to determine the age of wood in an archeology study.

"The main point of the project was to verify that date. The fact that we got it down to the fall of 1844 is pretty significant because there's no other dating science that can do that. Carbon dating is only plus or minus 60 years, but we can get it down to a season of the year, so that's pretty significant."

He said because tree rings grow every year and because certain species produce the same kind of characteristics in

the same area, you can determine the date of construction of a building like the carriage factory by comparing it to another with a more reliable date of establishment.

In this case, his team of scientists used a local church as a point of reference.

They then used a microscope to measure the width of the tree rings within 1,000th of a millimetre, which created a sort of line graph that would go up and down to make clear patterns of growth.

"We then compared the chronology of these logs to the ones we know have been locked in time [from the church] and simply pattern matched it. Once we did that, we could then identify the kill date we're looking at, and in most cases, historical buildings were built with wood that was cut down almost immediately ... and because the wood was used from the local area, we're looking at the same kind of signals. It's not like they would have brought in wood from Toronto that grew under different conditions."

Atlantic Geoscience Society members include earth scientists from universities, government and the mining, petroleum and offshore exploration industries.

After graduating in December, Mr. Selig is considering continuing his studies with a master's in geography or pursuing a bachelor of education.