



EAT HEALTHY
Snack program at Halifax school earns top marks. / E1

FATAL MVA
Man killed, 3 hurt in horrific pileup. / B1



Province

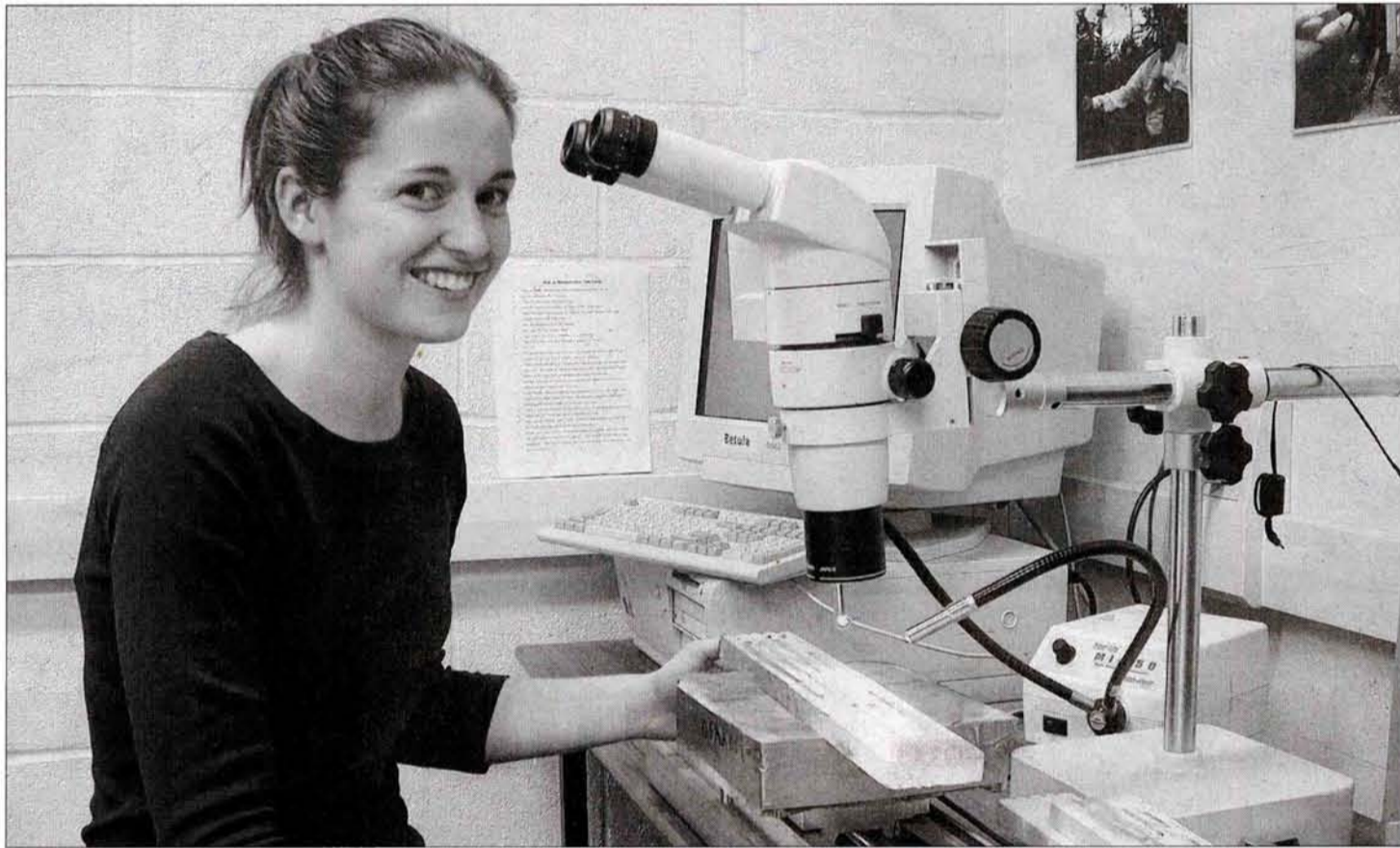
SECTION **B**
 TUESDAY
 APRIL 17, 2007



TIMELY FIND
Mount Allison student discovers province's oldest hemlock. / B2



SAVING THE PAST
Group concerned province not caring for older buildings. / B3



Mount Allison student Sarah Hart works in the Mount Allison dendrochronology lab, the only facility of its kind in Atlantic Canada. The 22-year-old environmental science student was recently shocked to learn that she had found the oldest-known hemlock tree in Nova Scotia. (MT. ALLISON DENDROCHRONOLOGY LAB)

Student finds province's oldest hemlock

By **GORDON DELANEY**
 Valley Bureau

SILVER LAKE — Sarah Hart at first couldn't believe her eyes. She had to check and double-check her research to verify that she was looking at the oldest-known hemlock tree in Nova Scotia.

"I didn't believe myself," the 22-year-old environmental science student said in a telephone interview Monday from Mount Allison University in Sackville, N.B.

The fourth-year student was peering through a microscope to measure a core sample containing the lines of an eastern hemlock growing in a remote forest.

"I measured it one night in the lab when I was here by myself," she said. "I had to measure three more times to make sure it was actually that old."

The sample was taken last summer from a tree near Silver Lake, close to the Shelburne-Queens county line, when Ms. Hart was working with the protected-areas branch of the Environment Department.

The next day, her supervisor measured the same sample to verify what it was telling them. "We came up with 418 (years) every time."

They checked the age records for eastern hemlock in Nova Scotia and found the tree is the oldest of its kind in the province, breaking the record by 20 years.

That dates the tree back to 1589. That year England and Spain were at war, the knitting machine was invented and Galileo began his experiments on the laws of bodies in motion, which would revolutionize science.

The tree, believed to be the oldest tree in Nova Scotia, also ranks as 11th-oldest eastern hemlock in the world and the third-oldest in Canada. The others are in Ontario.

"It is exciting," said Ms. Hart, a New Jersey native who plans to do graduate work with tree lines at the University of Victoria in British Columbia next year. She is writing exams this week and graduates from Mount Allison in May.

Although it's the oldest eastern hemlock discovered in Nova Scotia, the tree is not the largest, measuring only 26.5 centimetres round, a little less than the size of a sheet of standard photocopy or printer paper.

But what the tree lacks in girth it makes up for in height. Ms. Hart said she believes the tree survived the logger's saw for so long because it's skinny

and tall and has little commercial value.

The area around it has been logged in the past, she said, but still contains many other eastern hemlocks that are about 350 years old.

Ms. Hart began her work with Robert Cameron, an ecologist with the protected-areas branch, last summer. He could not be reached Monday.

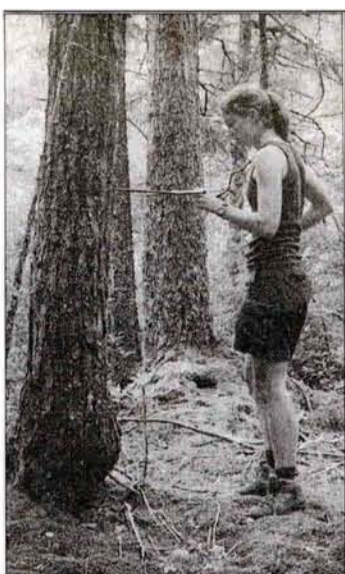
But he was quoted in Saturday's Toronto Globe and Mail as saying, "We knew there were old trees there. We didn't realize how old they were."

Ms. Hart was asked to determine the ages of some trees in a location the province was considering placing under its protected-areas plan. The land was recently acquired in a land exchange deal with Bowater Mersey.

Ms. Hart was asked to keep her discovery quiet until the negotiations were completed. "We agreed to keep it a secret so the negotiations wouldn't be interfered with."

She took samples from more than 60 trees on two lots. The samples were taken by drilling a small hole into the trees and removing a core.

Because of the amount of logging that's been done, it's quite difficult to find old-growth trees



Sarah Hart takes a core sample from the oldest-known hemlock tree in Nova Scotia. (MT. ALLISON DENDROCHRONOLOGY LAB)

in Nova Scotia, Ms. Hart said.

"I think it will be quite a feather in the cap of Sarah's team to think that they were able to be a major part in protecting this extremely rare and fragile piece of the environment in Nova Scotia," Colin Laroque, director of the Mount Allison dendrochronology lab, said in a release from the university. (gdelaney@herald.ca)