



CBC

532-year-old N.S. hemlock claims record for oldest tree in the Maritimes

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Nova Scotia only has a tiny fraction of old-growth forest left.

But thanks to research completed this summer, the province can lay claim to having the oldest tree on record in the Maritimes.

It's a 532-year-old eastern hemlock located in a stand not far from the South Panuke Wilderness Area, northwest of Hubbards.

The land used to be owned by the Bowater Mersey Paper Company. The province bought the parcel, along with many others, in 2012.



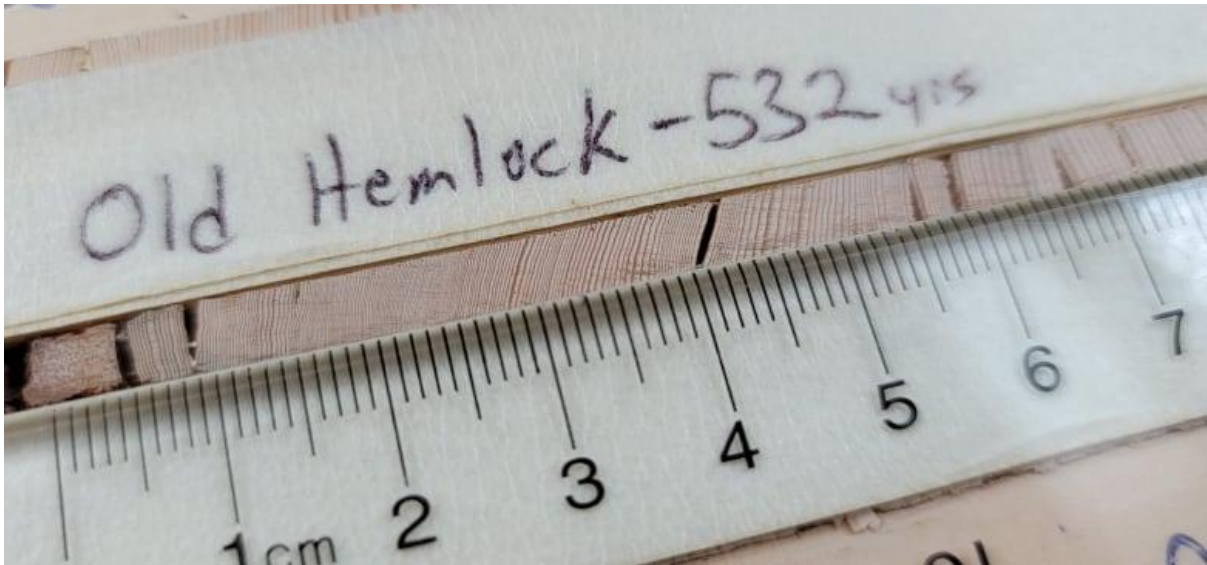
This summer, forest researchers with Nova Scotia's Department of Natural Resources and Renewables took core samples of roughly 100 trees in a small old-growth stand.

After counting the rings on one tree sample, Dalhousie University student Meaghan Pollock approached colleague Emily Woudstra.

"She said, 'I think we have aged [this tree at] 500 years old,' and I was like, 'No way! I don't believe that,'" said Woudstra. "So go show Brad and I want to count this afterwards, too."

Brad Butt, a forest researcher, didn't believe it either until he had a closer look at the sample.

"Yeah, there is definitely some excitement there," said Butt. "You kind of ... stop the clock for a minute and everybody had a pause to really have a look at it."



Woudstra counted the rings again to ensure the count was correct.

"[There] was kind of a buzz around the office and people kept asking if they could see the core sample, too."

'532 measurable tree rings'

To be certain about the tree's age, the province shipped the sample to Mount Allison University's Ben Phillips. Phillips is a dendrochronologist, or an expert in tree rings.

"This tree has 532 measurable tree rings," Phillips said during a recent video chat. "I measured every single one of them under a microscope to a thousandth of a millimetre.

"Some of those rings only had two to three cells in width."

The fact many of those rings were so closely spaced together is proof the tree grew very slowly. That made the wood exceedingly strong, according to Phillips.

He likened it to a commonly used building material.

"You wouldn't buy a piece of plywood that had two or three plies," he said. "You buy plywood that has ... maybe 10 plies."



"It has a lot of layers that makes it strong. Same thing with really old trees. When they have these little tiny tree rings, those rings are actually stronger."

Phillips found the last record holder as the oldest Maritime tree in 2005. That was a 465-year-old red spruce in Fundy National Park.

He's not upset that someone else now holds the record.

"Finding an old tree is amazing," he said. "The more old trees we have, the better"

Oldest tree not always the biggest

Those tight rings also tell a broader story about the stand where the ancient hemlock is located.

Peter Bush, manager of research at the Department of Natural Resources and Renewables, said the tree likely spent most of its life in the shade of larger trees, leading to the slow growth and resilience. It is sometimes why old trees are not the largest in any stand.

"There are some larger hemlock beside it but this one is the oldest," he said during a recent visit to the site.

"We were surprised that it was the oldest, but in some aspects also not surprised because we have seen this in other forest communities that not always the biggest tree is the oldest tree."

Another remarkable fact is the trees in this old-growth stand appear to have escaped cutting or burning, and the elder statesman of this stand has withstood the worst of the elements.