

Old Growth Red Oak

Umlah Hill Drumlin

"Multiaged old growth red oak stand on the Chebucto Peninsula"

Nick Hill & David Patriquin,
for the MTRI Old Forest Conservation Science
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David Patriquin: Speaker, Friday 2:25-2:55 pm (Gunner Room).

David Patriquin retired as a Professor of Biology from Dalhousie University in 2008. Since then has been active in several natural history and environmental organizations with a focus on the Chebucto Peninsula.

Title: Multi-aged old growth red oak stand on the Chebucto Peninsula

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Abstract:

A Rapid Appraisal study was conducted July 21-22, 2009 to verify existence of and characterize an OG red oak stand on Umlah Hill southeast of Oak Hill Lake. It had been known years ago by Ralph Wheadon as a NSDNR employee and fire warden for the area. The site was visited again on Sep 3-4, 2011 to look for charcoal in soil profiles. The study was supported in part by Five Bridges Wilderness Heritage Trust.

The stand has features of a multi-aged, old growth oak forest with snags and fallen dead in a range of diameters and distinct moose maple and witch hazel subcanopies. The overstory is made up mostly of red oak, some yellow birch, occasional white birch; red maple was common, but tended to be in the subcanopy/overgrown by oak. The stand covers approximately 15 ha. Cores indicate the larger trees are over 100 years of age. We observed scat from mainland moose as well as evidence of the brown bear and many cavities in snags. Some adjacent areas support younger oak stands with some, but not all of these features.

Soil profiles revealed charcoal layers in adjacent areas supporting younger oak stands, but not at Umlah Hill, which appears to have escaped area fires by being relatively isolated and surrounded by wetland. Wind induced tree top damage continuously causes decay in the tallest oaks and these produce single tree light gaps and valuable habitat for a suite of snag-dependent wildlife. This mature forest is thus composed not of trees of several centuries old, but of younger trees yet the forest has the same characteristics of typical OG. This type of old growth red oak forest is apparently now rare within the whole range of red oak in North America.

