

# **Point Pleasant Park's Woodlands and Fire Management**

**Peter Duinker**

**Professor Emeritus, Dalhousie University**

**Co-Principal, Sylveritas Ltd.**

**Founder Halifax Tree Project**

**Presentation to**

**Point Pleasant Park Advisory Committee**

**2025-03-04**

# My background on this topic

- **Forest Ecology and Management**
  - 45+ years of research
- **Forest Fire**
  - 3 summers mid-1970s, forest fire fighter, NW Ontario
- **PPP**
  - Member, PPP Rehabilitation Task Force, 2003-4
  - Co-author, Point Pleasant Park Comprehensive Plan – 2006-2008
  - Creator, Tour Stop #6
  - Member, PPPAC, 2014-15
  - Research projects in the park



# Themes to address

- **The PPP woodlands**
  - 1750 to 2003
  - 2003 to 2025
- **Wildfire issues today**
- **The fire triangle**
- **The PPP woodlands**
  - 2025+

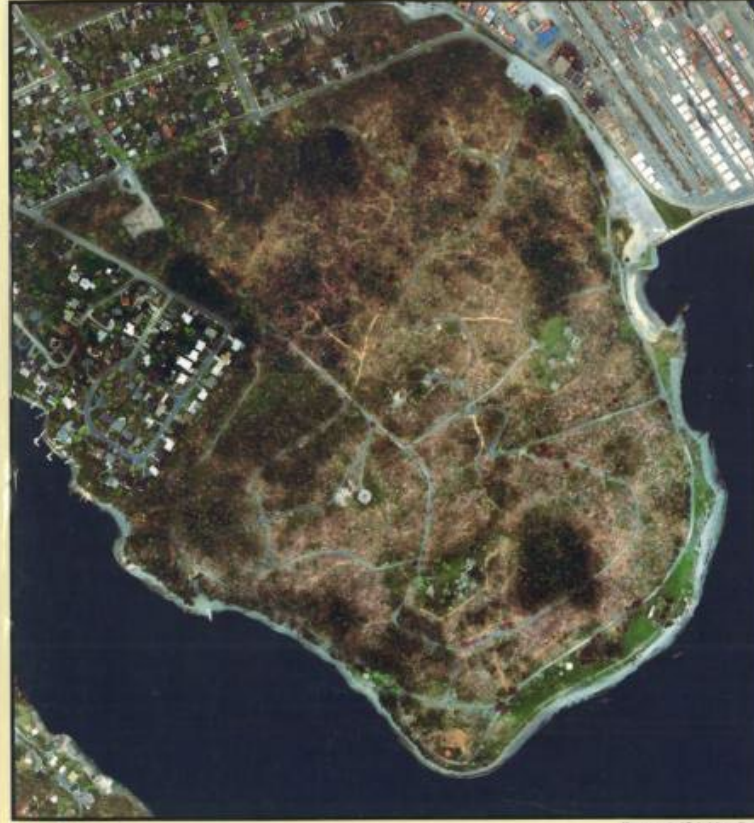
# The PPP woodlands – 1750 to 2003

- 1750 – magnificent Acadian old-growth forest – beech, oak, yellow birch, sugar and red maple, red spruce, hemlock, white pine
- 1750 to ca. 1900 – totally clearcut
- ca. 1900 to 2003 – mostly natural regen, lots of minor plantings; conifer-dominated
- 2003 – about  $\frac{3}{4}$  flattened by Hurricane Juan

# POINT PLEASANT PARK, HALIFAX, NOVA SCOTIA



Data Collected June 30, 2001

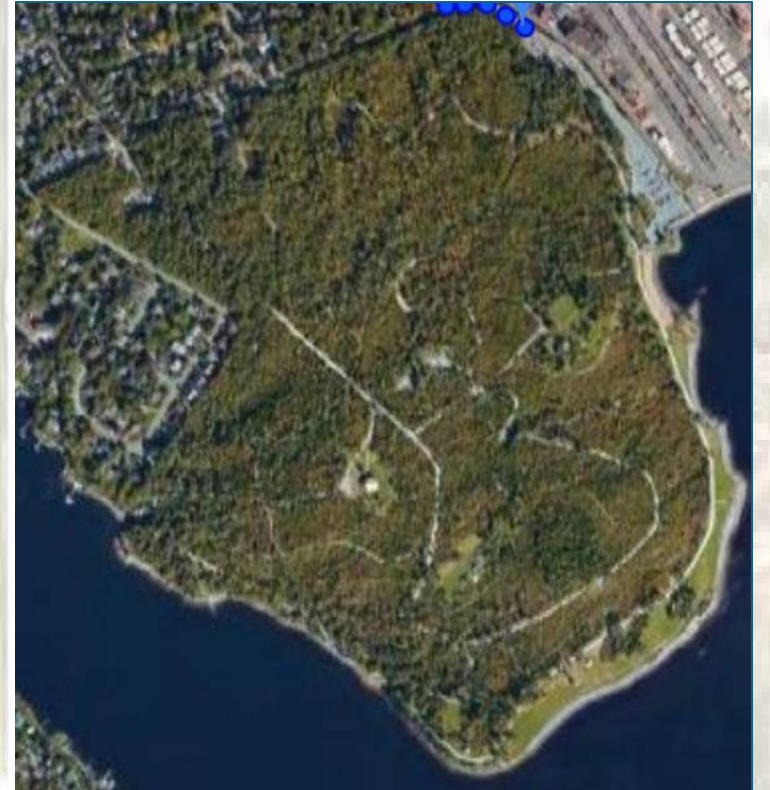


Data Collected May 31, 2004

**HDI** Hyperspectral  
Data  
International Inc.

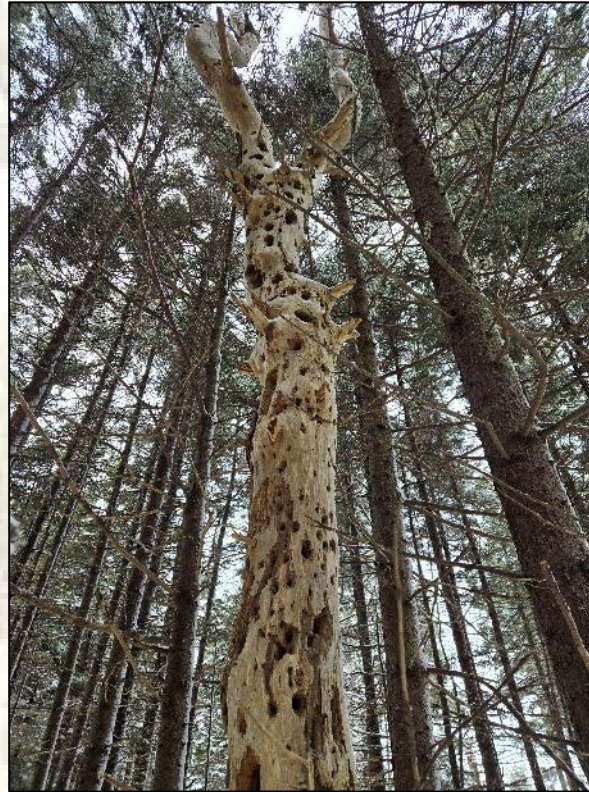
A Member of the ADI Group of Companies

Hyperspectral Data International  
1071 Bayers Road - Suite 119  
Halifax, NS, Canada B3L 3C3  
Phone: (902) 481-2161  
Fax: (902) 483-8025  
www.hdi.ca



# The PPP Woodlands – 2003-2025

- 2004 – clean-up – almost all downed wood removed
- 2007-08 – planting of 101,000 seedlings
- Pathside snags made safe but left standing
- Inwoods snags left alone for biodiversity enrichment
- Late 2010s to 2024 – thinnings
- Today – more young woodland than old, but some older patches (called witness groves in the plan); more balanced composition of conifers and non-conifers

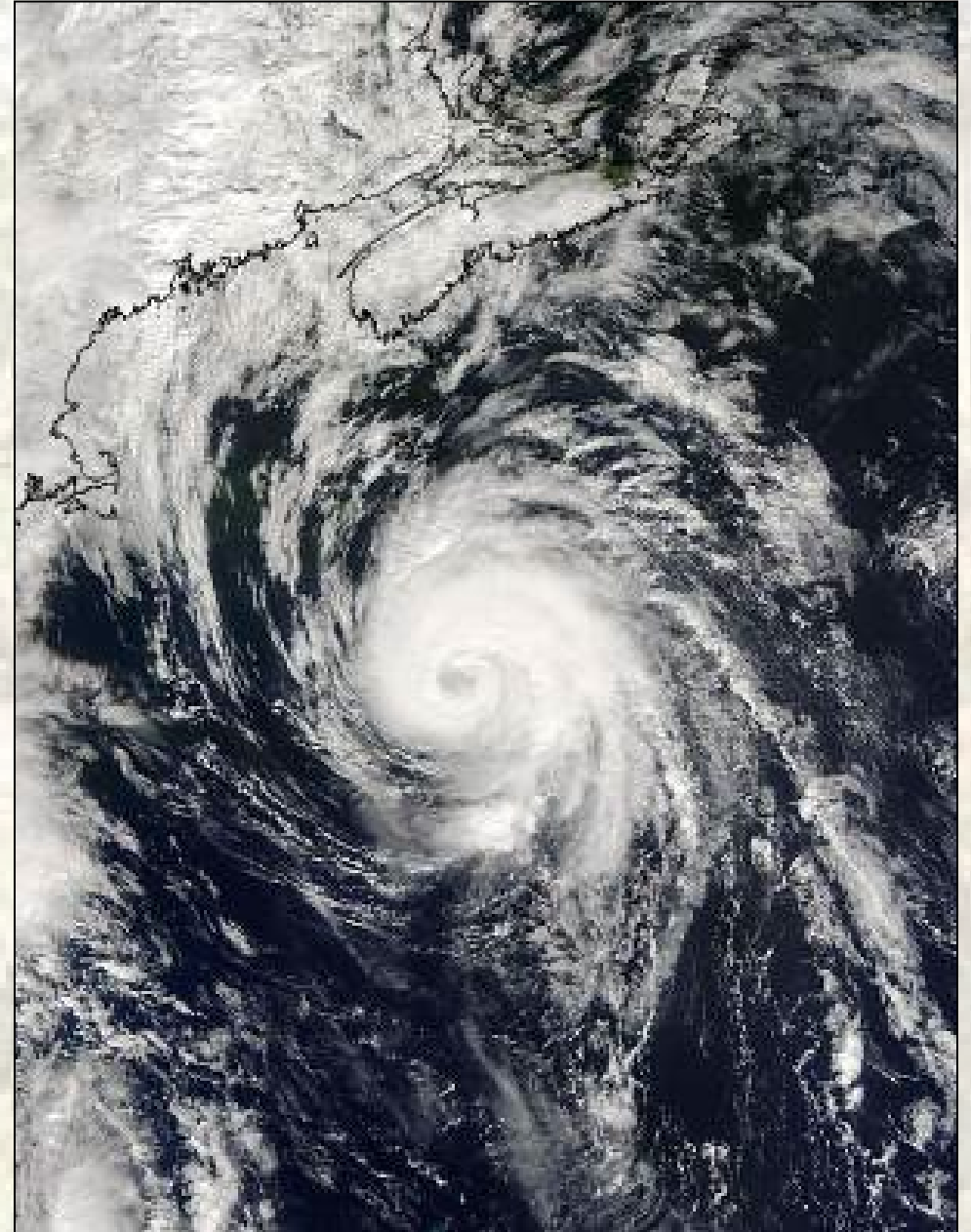


# Wildfire issues today

- **Climate change**
  - Warmer; droughts more common; strong winds more common – bad things
- **Woodland conditions**
  - More non-conifers – good thing
  - Young forest – good thing
  - Fine materials on the forest floor (good thing) or near the forest floor (bad thing)
- **Potential ignition**
  - Increased visitation - ??
  - More irresponsible behaviour?
  - Encampments - ??
- **Water supply for suppression**

# The fire triangle

- **Oxygen**
  - Not in short supply (always there; subject to suppression efforts)
- **Fuel**
  - Dry plants will burn!
- **Heat**
  - Ignition sources are very high heat
  - Climate change accelerates the drying of plant materials





# **The PPP woodlands - 2025+**

- **Tending toward high-diversity, more-windfirm woodland with minimal dry ladder fuels**
- **Management considerations**
  - **Except for large snags, move deadwood down to the forest floor**
  - **Install fire-prevention signs**
  - **Study the issues with freshwater supply**
  - **Special considerations for encampment conditions and locations**



# **Point Pleasant Park's Woodlands and Fire Management**

**Peter Duinker**

**Professor Emeritus, Dalhousie University**

**Co-Principal, Sylveritas Ltd.**

**Founder Halifax Tree Project**

**Presentation to**

**Point Pleasant Park Advisory Committee**

**2025-03-04**