### Into the Woods

#### Some Notes on New England Trees and Forests

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# Into the Woods

- Introduction
- Rant: Counting Rivets, Windows and Rings
- Tree Note #1: Pointy Trees
- Tree Note #2: Edges
- Tree Note #3: Tree Heights

Note: Trees are illiterate and may ignore what books say about them. Some grow where they shouldn't and some won't grow where they should.



# Introduction

- BSF and PhD in Forest Economics
  - Dendrology class in first semester
  - Field forester in 1978
  - Driving a desk since then
- Sensitive to tree portrayals
  - April Morning, 1988: Lexington & Concord
    - Battle was April 19—no leaves on trees (see above)
    - Trees in movie were aspen, already in leaf (filmed in QC)—aspen stands are not common in New England
  - Drums along the Mohawk, 1939: Upstate NY
    - Filmed in PA and UT (mostly), western pine forest







- As we move away from the track, concern for accuracy and precision decreases
  - Locomotives and rolling stock:
    - Rivet counters—32" wheels instead of 33"!
  - Buildings:
    - Window counters—selective compression is acceptable
  - Trees:
    - Ring counters—nobody mentions the trees!!!





### Rant: Counting Rivets, Windows & Rings





• Set in 1953

Source: http://whiteriverdivision.blogspot.com





Spruce/fir prototype and model

 Many bottlebrush trees available commercially









Few pointy trees in the woods in southern New England
 White Spruce



Found in swamps/bogs











Source: Wikipedia



• Few pointy trees *in the woods* in southern New England

– Remember that picture of the Battle of Lexington reenactment?



The pointy tree in the background was planted there—may not even be a Northeast species







- Summary
- There are five pointy tree species in New England
  - Black spruce grows in wet areas down to the CT border
  - Tamarack grows in wet areas down to the MA border
  - Red spruce and balsam fir grow in the Berkshires
    - But not south and east of Concord, NH
- None of this applies to western forests





You won't usually see tree trunks when driving through New England forests
Trees grow leaves to the ground along the edge of the forest







- Trees fight for light (and nutrients and water)
   Leaves need light
  - Some species need more light, some need less
- Trees in the open will have leaves all the way to the ground
- Trees in the forests will have leaves in the canopy
- Trees on the edge of a forest will have leaves tothe ground on the open side and fewer/noleaves on the forest side







- Trees in the open have leaves to the ground (unless pruned)
- Trees in the forest have leaves in the canopy

Gray Rest Area, Maine Turnpike









- Leaves down to the river
  - NH side of Salmon Falls River from Vaughn Woods State Park, South Berwick, ME
  - Picture taken from a spot cleared for the view







- Leaves down to the ground/river
  - ME side of Salmon Falls River
  - No view clearing







- Turned 180 degrees
  - Hemlock forest, very dark
  - Only understory is hemlock (some beech near the river's edge)







- Northeast forest grow fast
- Can't see into the woods
- Unless roadside/trackside has been cleared *recently*



#### I-95 near Millinocket

Cleared ~5 years ago



Recently cleared





- Browse lines
  - An exception not common to northern New England
- Areas with HEAVY deer population (e.g., PA, MI) get browse lines, 6-7' high



Source: http://www.friendsofsylvania.org/deer.html





- Summary
- Don't model tree trunks along your rightof-way in New England
  - Unless your maintenance crew has just cleared the edges
- If the right-of-way was cleared a (very) few years ago, shrubs and young trees will be growing back
- None of this applies to western forests





- Most hardwood trees in a timber stand grow to similar heights
  - Puff ball hillsides are OK
  - Pure puff ball hillsides are better for central Appalachian forests
- White pine often towers above the canopy in New England
- Technical data:





#### Average Northeast Tree Heights





Beech-Birch-Maple (Hardwood) Forest







Spruce/Fir Forest







• White pine often towers above the canopy





• Not *every* white pine towers above the canopy







- Modeling Eastern White Pine
  - A common tree in New England forests, but no good commercial models(?)
- NOT a white pine—too pointy!
  - <u>http://cs.trains.com/mrr/f/11/t/69465.aspx</u>
- Very good looking—except these are computer graphics models!!!
  - <u>https://store.speedtree.com/store/eastern-white-pine-ue4/</u>
- Decent looking scratch-built white pines
  - <u>http://algonquinrailway.blogspot.com/2014/09/eastern-</u> white-pines.html
  - <u>http://model-railroad-hobbyist.com/node/15501</u>





- Summary
- Average mature hardwood forest is 60-75 feet tall
- Average eastern white pine is 90 feet tall

• None of this applies to western forests



## Useful(?) Information

- Pointy Trees
  - Pointy trees (spruce and fir) are not commonly found in southern New England forests
    - Except in the mountains
  - People plant them in yards and parks
- Edges
  - You should see very few tree trunks along a forested right-of-way—leaves and branches to the ground
  - Unless the MOW crew has been by recently
  - "Super tree" models belong in developed areas (residential/commercial/industrial)
- Tree heights
  - Eastern white pines poke above the hardwood canopy
  - ~60-70 feet is a good average height for northeast trees
    - Unless the ground is wet or rocky or high elevation





### Thanks for Watching



