Indicators of Hidden Defects

And More....What's Visible to a Timber Cruiser

Timber Measurements Society - Coeur D' Alene, ID - 2016

Introduction

 Paul Wagner – Vice President/Project Manager-Forester, ACI Instructor, 30 years cruising

University of Washington:

B.S., Forest Management, 1980 MBA, 1988

pwagner@atterbury.com

PO Box 891
Darrington, WA 98241
206-499-0080
Atterbury.com



Atterbury Consultants, Inc.

3800 SW Cedar Hills Blvd., Suite 145 Beaverton, OR 97005

atterbury.com

- Started by Toby Atterbury in 1985
- Offices in Beaverton, OR. and Darrington, WA.
- Services
 - Timber Cruising, Forest Inventory, GIS
 - Appraisals, Timber Valuations
 - Wood Supply Studies, Harvest Levels
 - Seminars
 - Software
 - Forestry Equipment

What a Timber Cruiser Can See

- Some indicators will lead to scaling defect in a log
- Some will be bucked out as cull and left in the woods

It Depends....

- If a log is high value to a local market, it may be long butted and cleaned up
- Or it may be left long and scaling defect taken in the log

Is there product recovery around the defect?

White speck conks, interior defect & product



White speck on western hemlock



White speck in Douglas-fir branch





Brown cubical butt rot



Polyporous schwienitzii "cow pie" fungus

On Douglas-fir, usually on the ground near old stumps



Age – particularly residuals in a stand



Extent of decay usually depends on age & combination of agents



Taking a Core to Gauge Extent



Laminated Root Rot



Blown Down Trees With Little to No Root Wad



It can be extensive even in young timber



Dark, reddish stain



Wood separates along annual rings



Fire or Mechanical Scar

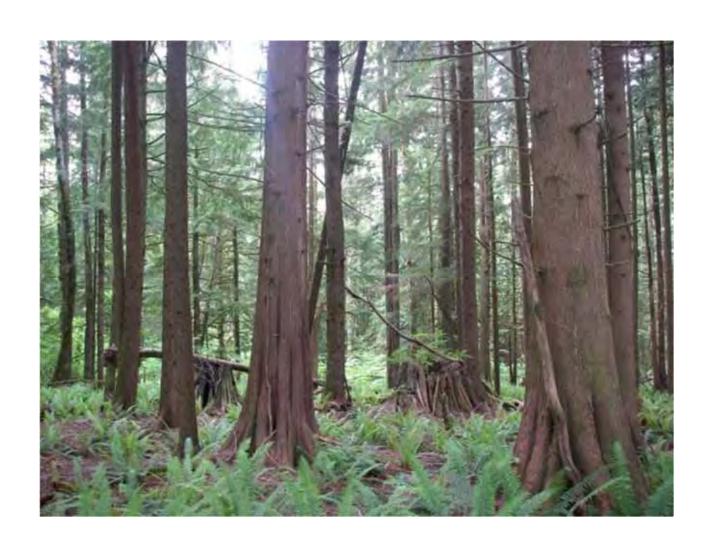
Fire scar defect + carpenter ants in brown cubical butt rot



Obvious frass from carpenter ants in old basal scar



Cruiser view of typical red cedar....



Field indicators of what those cedars may look like inside

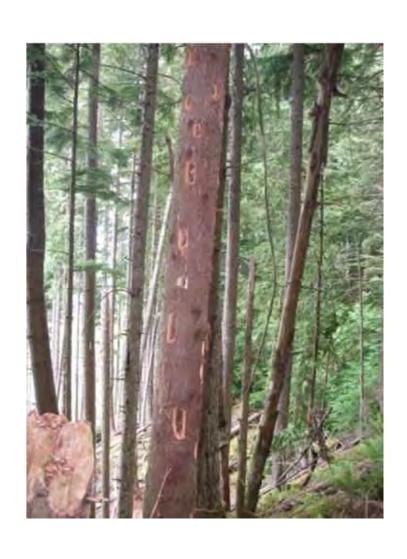




Frass in cobwebs coarse or fine?



Pileated woodpecker holes





Carpenter ant galleries following decay



Indicators may be on down wood



Wormy cedar



Pitch & frass in bore holes



Larva gallery in branch stub



Odd shape to bole



May mean nothing if that is the only indicator - Combinations mean more



Sap sucker feeding



Small saprophytic conks -



Frost cracks or not...

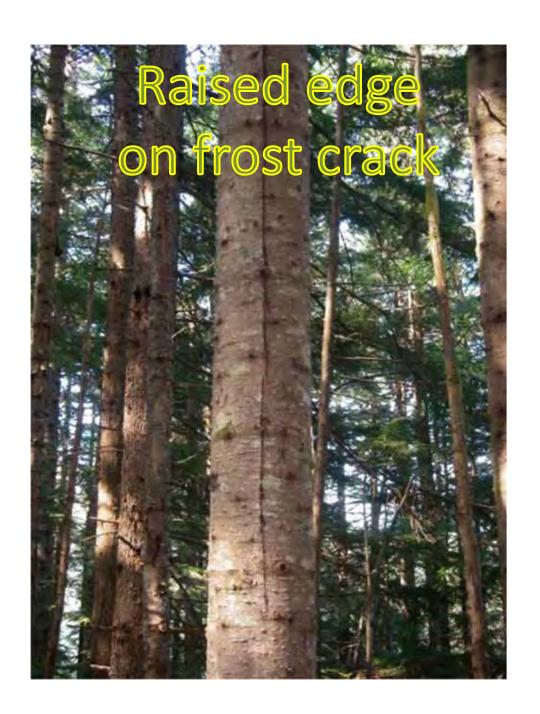




Or is it?







Deep frost crack





Pitch/Sap Streaking





Indicators are:

- A showing that there is, or may be decay/defect
- A showing possibly of how much
- A potential impact on sort and/or log grade
- A caution to look closer

Indicators are where you find them



Nearby log decks



Broken/blown down trees



Cutting firewood



Old branch scar where quinine conk entered tree



Indicators of other stuff a cruiser may need to know

- How much breakage will there be?
- Are there areas where harvest may be restricted?

 And training: what does a log look like inside with outside indicators?

Breakage indicators



What will breakage look like?



Market cutting practices to make logs?



Large limbs, within 40 miles of saltwater ???



Fish type stream – will require buffer



Poor falling – might be something I look at in a stump cruise



Questions - Comments

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