



2006 Interior Grade Endorsement Seminar



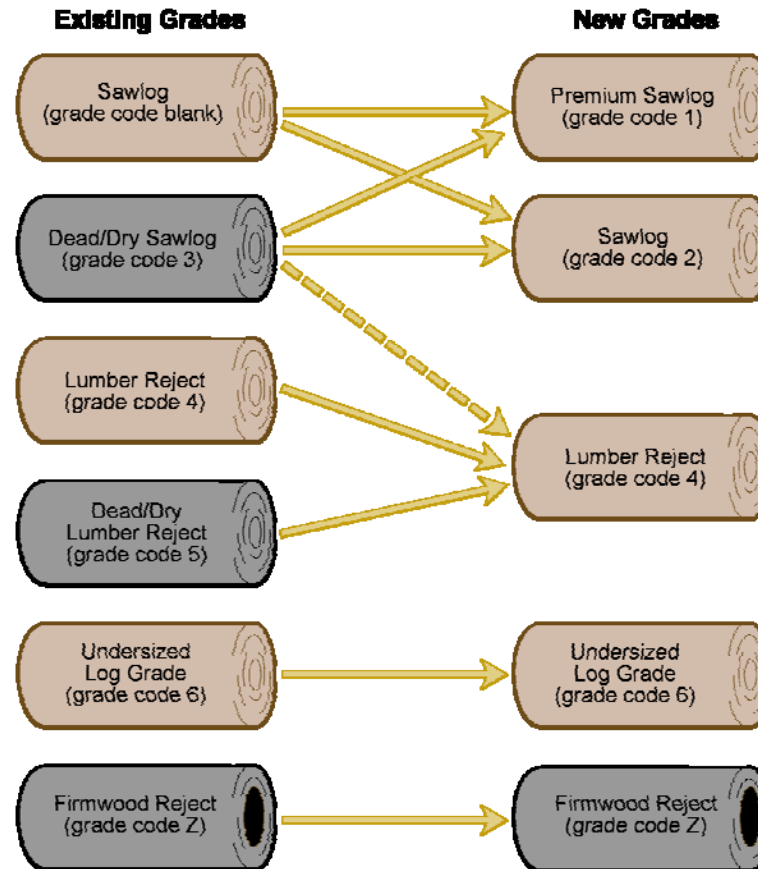
Course Overview

Day 1:	Activity	Location
Morning Session	Theory (Introduction to new grades) <ul style="list-style-type: none"> • presentation • example logs • problem set 	Classroom
Afternoon Session	Practical (Application of new grades) <ul style="list-style-type: none"> • discussion logs • quiz logs 	Log Yard
Day 2:	Written exam (25 questions, 1.5 hours)	Classroom
	Practical exam (25 logs, 2 hours)	Log Yard

Detailed Agenda

Day 1	Task	Time (Estimate)
Summary	Introductions & Opening Remark	8:30 am – 8:45 am (Classroom)
	Course Overview	
General Scaling	Summary of Grading Changes	8:45 am – 10:00 am (Classroom) (Presentation & discussion)
	Grade Precedence	
	Permissible/Non-permissible defects	
	Ambrosia Beetle	
	Cat Face	
	Knot Measurements	
	Twist	
	Slab Measurements	
	Check Measurements	
	Compression Wood	
*** 10 minute break *** (10:00am – 10:10am) ***		
Grading Specifics	Introduction to Premium Sawlog Grade Code #1	10:10 am – 12:00 pm (Classroom)
	Introduction to Sawlog Grade Code 2	
Exam Prep	Paper Scaling & Word Problems	
	Theory Wrap-up Q&A	
*** 1 hour Lunch Break & Travel Time (12:00pm – 1:00pm) ***		
Practical Scaling	Demonstrations on selected logs	1:00 pm – 4:30 pm (Log Yard)
	Assigned Logs	
	Review of selected logs	
*** End of Day 1 (4:30pm)***		
Day 2	Q&A session (if warranted)	8:00 am – 8:30 am (Classroom)
Evaluation	Written Exam (1.5 hrs)	8:00 am – 9:30 am (Classroom)
	Practical Exam (2 hrs)	10:00 am – 12:00 pm. (Log Yard)
*** End of Seminar (12:00pm) ***		

How will it look?



Summary of Grade Changes:

- Deletion of Dead/Dry Sawlog (Grade code 3)
- Deletion of Dead/Dry Lumber Reject (Grade code 5)
- Addition of Premium Sawlog (Grade code 1)
- Amendment of existing Sawlog requirements (Grade code blank = grade code 2)

Grade Precedence

(as per sec. 6.5.1.1 of the scaling regs)

Hierarchy:

- **Grade code Z**
- **Grade code 6**
- **Grade code 1**
- **Grade code 2**
- **Grade code 4**

Permissible vs. Non-Permissible Defects:

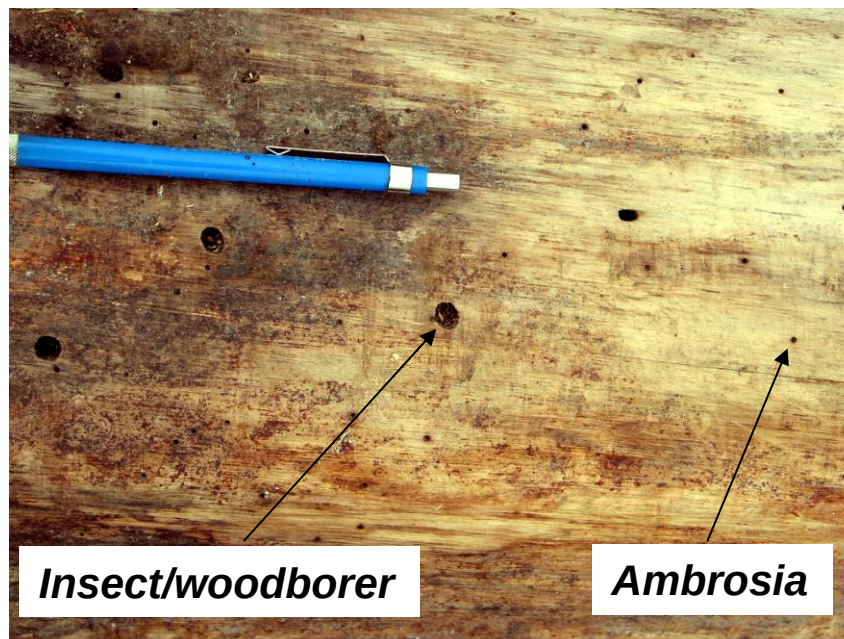


Non-Permissible Defects:



- Example:
 ≥ 4 cm check in grade code #1

Permissible Defects:



Example:

- Ambrosia and stain allowed in both Sawlog grades
- Insect holes (limited in grade code 1)
 - allowed up to and including 4 per metre in grade #1

Ambrosia Beetle:



- **Beetles:**

About 3.5 mm in length. Shiny black or brown with pale coloured stripes. Shape of head differs between male and female.

- **Damage:**

Adults bore into dead trees and winter felled logs and introduce "ambrosia" fungi upon which they and their larvae feed. Galleries are made in the sapwood and the white coloured frass around the entrance hole indicates this is ambrosia rather than bark beetle attack.

(Source: http://www.forestry.ubc.ca/fetch21/FRST308/lab7/trypodendron_lineatum/stripped.html)

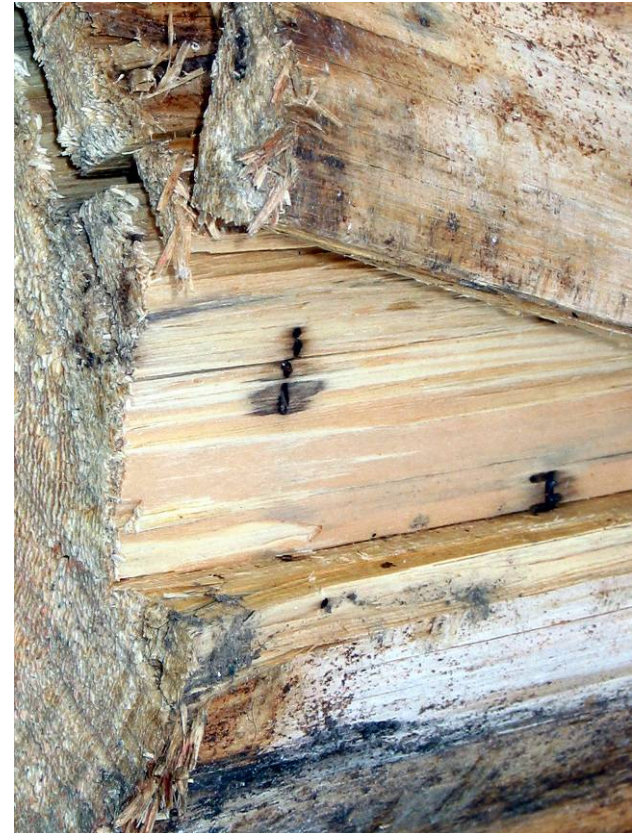
Ambrosia: External Characteristics

- white frass (spruce)



Ambrosia: Internal Characteristics

- boring holes (sapwood)



Ambrosia: Grading Implications

- allowable in both grades code 1 & 2



Cat Face:

Section of log with catface 2cm x 2cm x 2cm or greater must be assessed.

- Grade #1: the entire portion of the log affected is considered grade reduction
- Grade #2: the affected area only is considered for grade reduction



Interior Grade Endorsement '06

Knot Measurements:

- Changes:
 - 1 OLK/2.5m of log length (vs. 3.0m)
 - Knot Spacing (grade code 1 only)
 - spacing for knots ≥ 3 cm
 - min. of 30cm lengthwise & 10cm side to side
 - 2 knot tables (knot size based on diameter class)



Twist:

Measure twist over a representative 15 rads (30cm) of log section.
Based on the reference diameter (top or midpoint).

- Grade #1: can not exceed 7% (min. 2cm, max. 6cm)
- Grade #2: can not exceed 15% (min. 4cm, max. 9cm)



Slab Measurements:

Now measured – “maximum width at which a 4 cm (2 rads) thick board can be cut at right angles to the grain (annual rings).”

- Grade #1: Minimum of 20 cm in width & 20 cm thickness
- Grade #2: Minimum of 15 cm in width & 15 cm thickness
- Grade #4: Minimum of 10 cm in width & 10 cm thickness



Measuring Checks:

- * Extremely important to identify and measure.
(complexities with interpretations, etc.)

Grade #1:

- allows < 4cm
surface checking



Grade #2:

- portion of log 5-7r, 4cm checks not allowed
- surface checks 2cm or less are allowed (all diameters)

Compression Wood:

- Calculated for Grade code #1 only
- Defined as “heart pith displacement $> 20\%$ from the geometric centre of the log”
- Grade consideration up to 2m (or local knowledge)



Interior Grade Endorsement '06

Grading Amendment Overview:

- Deletion of:
 - Dead/Dry Sawlog (Grade code 3)
 - Dead/Dry Lumber Reject (Grade code 5)
- Addition of:
 - Premium Sawlog (Grade code 1)
- Amendment of:
 - Existing Sawlog
(Grade code blank = grade code 2)

Grading Amendment Overview:

Emphasis on:

Quantity:

- **Size**
 - Top diameter for code 1
 - 5-7R section of log
- **Checks**
 - 4cm checks not allowed in grade 1
 - Ignore surface checks 2cm or less
 - 4cm checks not allowed in 5-7R portion
- **Cat Face**



Quality:

- **Twist**
 - Grade #1: can not exceed 7%
 - Grade #2: can not exceed 15%
- **Knots**
 - 1 oversized/2.5m
 - Spacing for grade code #1
 - Section of logs 5-7r, oversized not allowed
 - 2 knot tables
- **Insect Holes** (grade #1 only)
 - allowed $\leq$ 4/metre
- **Compression Wood** (grade #1 only)
 - allowed $\leq$ 20% offset