

# Idaho Log Scaling Manual



## Idaho Log Scaling Manual

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Scribner Decimal "C"  
Measurement Rules

Idaho Board of Scaling Practices  
2008 Edition

This manual explains official measurement rules for determining board  
foot volumes of harvested forest products by Idaho licensed log scalers

Timber Measurements Society Meeting  
Reno, Nevada  
October 2008

# Idaho History of Scaling Manuals

## ▣ Timeline:

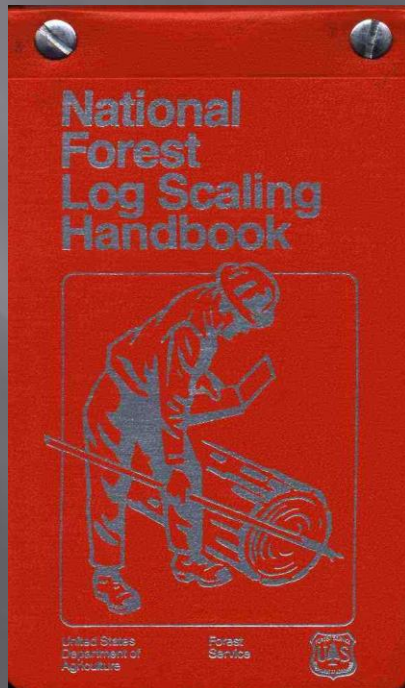
- 1950s – National Forest Log Scaling Handbook
- 1960s – Idaho Manual of Instruction for Log Scaling (*VO-ED No. 38*)
- 1974 – VO-ED 38 revised
- 1985 – NFLSH revised, amendment No. 6 edition

## ▣ Idaho Log Scaling Law:

- 1970 – Log Scaling Act law restricted scaling to either NFLSH or VO-ED 38
- 1979 – law amended, allowed scaling by NFLSH
- 1998 – law amended, restricted scaling to IBSP rules

# Idaho Log Scaling

- ▣ Almost exclusively Scribner decimal “C”
- ▣ State law empowers IBSP to set scaling rules
- ▣ Current scaling rules



Chapter 3 Rules  
Measurement Rules for  
Forest Products  
of the  
Idaho Board of Scaling  
Practices

*(IDAPA 20.06.03)*

# Idaho Log Scaling

- ▣ Almost exclusively Scribner decimal “C”
- ▣ State law empowers IBSP to set scaling rules
- ▣ Current scaling rules
  - Administrative rules
  - NFLSH (Amendment No. 6 Edition)
- ▣ **MANDATORY** gross scale rules
- ▣ “*Discretionary*” net scale rules
  - Applicable unless modified by contract agreement
  - Three different product classifications

# Development of Idaho Manual

- ▣ Began in late 1990s/early 2000s
  - Attempt to achieve statewide standard net scale
  - Unable to reach consensus
- ▣ Eliminate reliance on federal scaling manual(s)
- ▣ Need for quick reference
  - Log scalers want a ready reference
  - Current rules are cumbersome and inefficient
- ▣ Need to clarify existing rules
  - Interpretations
  - Additional information

# Development of Idaho Manual

- ▣ Idaho Scaling Board gave approval - June 2006
  - To be based upon current Idaho scaling rules
  - Minimal introduction of new scaling procedures
  - Web-based design
- ▣ Intent of Idaho Log Scaling Manual
  - Rules/reference guide for Idaho licensed scalers
  - Not intended as a scaler training manual
  - Solely Scribner decimal “C”
  - No log grading standards (only scaling)

# Idaho Log Scaling Manual

- ▣ Currently in “rulemaking process”
  - Idaho law provides rigorous adoption procedure
  - Culminates with approval of state legislature
  - Idaho Log Scaling Manual likely to become “official” during Spring, 2009
- ▣ Availability
  - IBSP website – [www.ibsp.idaho.gov](http://www.ibsp.idaho.gov)
  - Google search – “Idaho scaling” or “scaling manual”
  - Possibility of printed version in the future

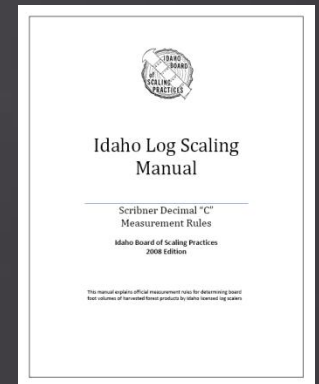
# Substance of Idaho Manual

- ▣ Five main Chapters & Appendix section
  - Chapter 1 - Introduction
  - Chapter 2 - Gross scale
  - Chapter 3 - Sawlog Net scale
  - Chapter 4 - Pulp Net scale
  - Chapter 5 - Cedar Products Net scale
    - ▣ Appendix 1 - Species Identification
    - ▣ Appendix 2 - Volume Table (Idaho)
    - ▣ Appendix 3 - Length Determination Table
    - ▣ Appendix 4 - Taper Table (butt log standard tapers)
    - ▣ Appendix 5 - Common Rots of Idaho Logs

# IDAHO LOG SCALING MANUAL



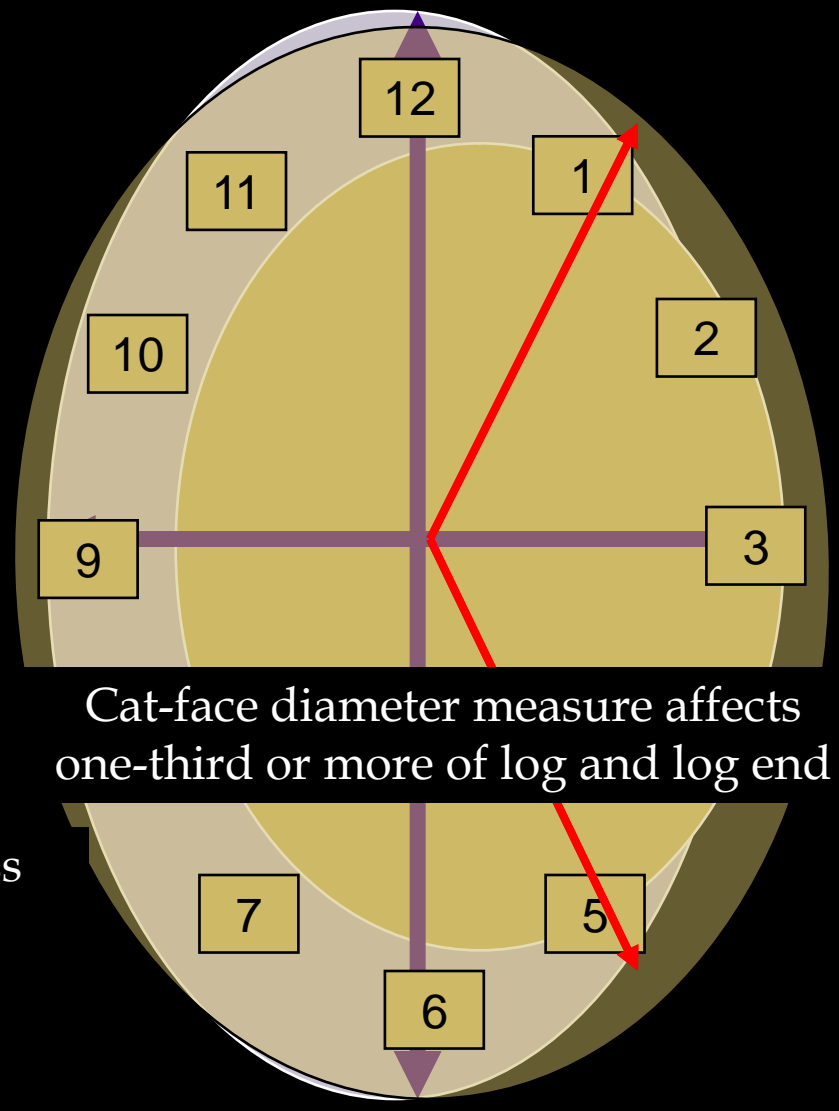
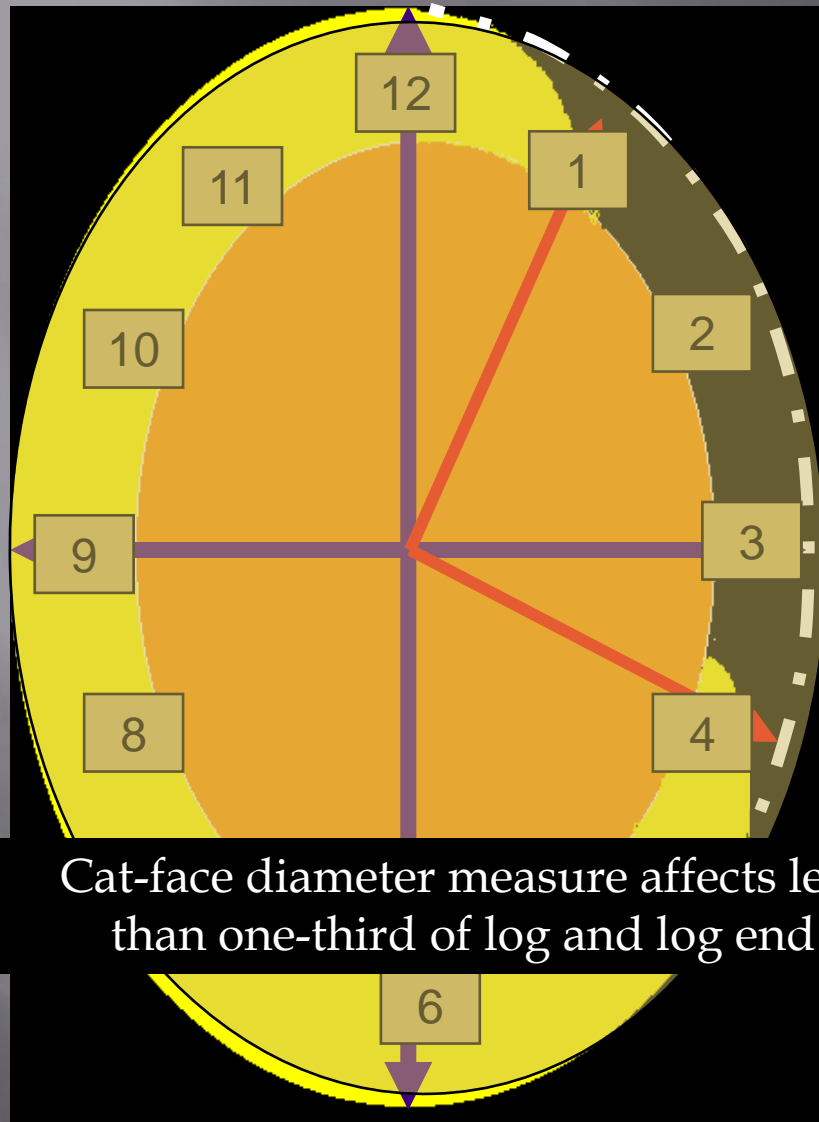
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June 2008 Edition



# New or Modified Scaling Rules

- ▣ Section 2.34 (New) **Cat-face Scaling Diameter**

*“When less than one-third of the diameter is missing visually project the diameter through the void area and take appropriate diameter measurements. When one-third or more of the circumference (outside area) is affected, take diameter measurements inside the affected area.”*



Cat-face diameter measure affects less than one-third of log and log end

Cat-face diameter measure affects one-third or more of log and log end

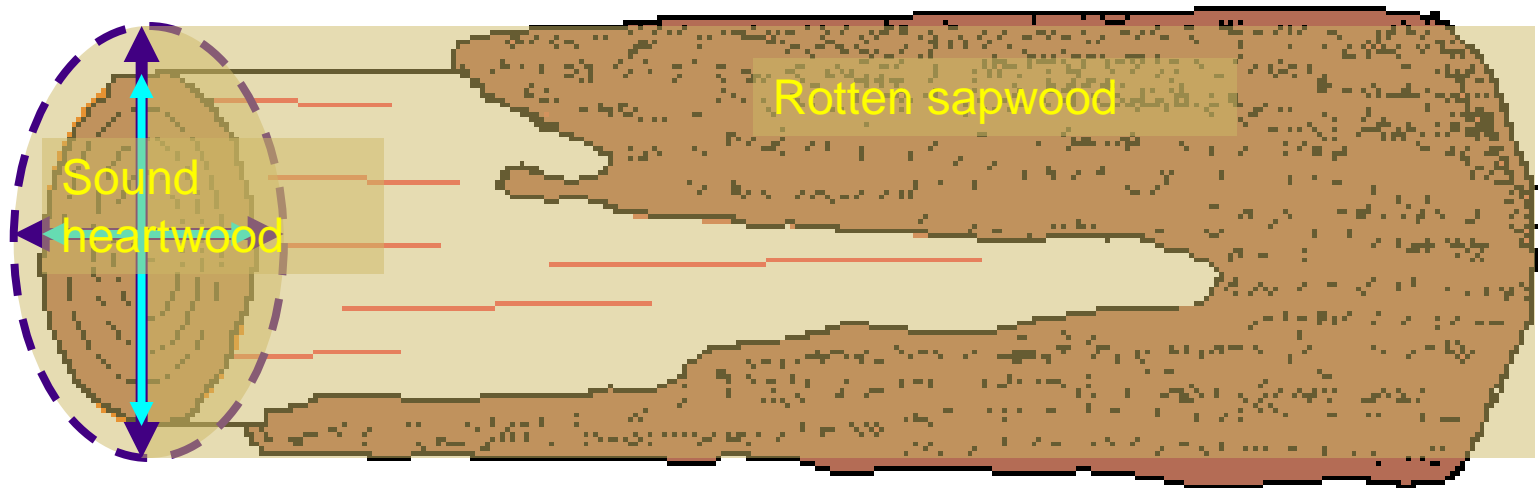
# New or Modified Scaling Rules

## ▣ Section 2.34 (Modified) Sap-rotted logs

“When *some (or most)* of the rotten sapwood has sloughed away, the gross diameter or outside diameter will be determined by measuring the remaining sound wood and adding thereto the estimated thickness of the missing sapwood. *When all of the sapwood has sloughed away, the diameter will be determined by measuring the remaining wood in a normal manner (narrow and right-angle measurements).”*

# Sap Rot Log – Some Sapwood

Measure the sound inner core



Reconstruct the sloughed sapwood

Scaling diameter includes sloughed sapwood

# Sap Rot Log – No Sapwood

Measure the log as presented (i.e., the “inner core”)



DO NOT reconstruct any sloughed sapwood

Scaling diameter includes only the sound inner core

# New or Modified Scaling Rules

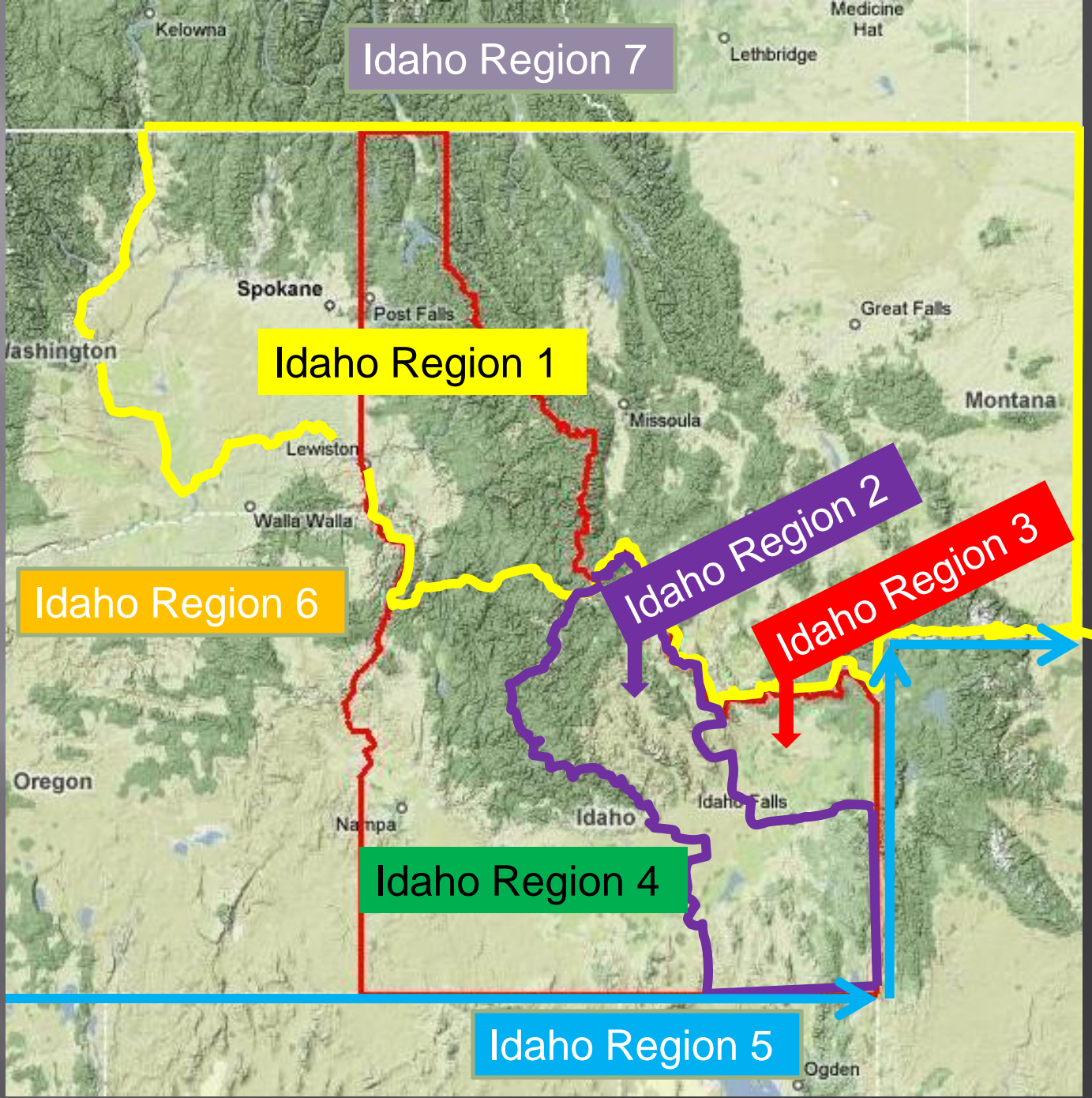
- ▣ Section 2.51 (New) **Cedar Products Pieces Shorter Than Eight Feet**
  - Explains *cordwood measurement* procedure
  - Explains *board foot conversion* formula
- ▣ Section 2.53 - Standard Converting Factors Table
  - (New) Adds *topwood conversion* to board feet
  - (Modified) Removes “Derrick set (11pieces)”
  - (Modified) Clarifies cubic foot shape/dimensions

# New or Modified Scaling Rules

- ▣ Section 3.511 (Modified) Broken Log Ends
  - “Rule 1. Logs under 16 inches. If one-quarter to one-half of the end section within the scaling cylinder is *broken or* gone, deduct one-half the length affected. If more than one-half the end section is *broken or* gone, consider the entire end lost and deduct for the full length affected.”
- ▣ Section 3.54 – (New) **Foreign Material or Hardware**
  - Provides defect recognition information
  - Prescribes length-cut deductibility

# New or Modified Scaling Rules

- ▣ Section 5.3 (Modified) Merchantability Standards (for Cedar Products Net Scale)
  - Minimum top diameter *5.51"*
  - Minimum shell thickness *3.51"*
  - Minimum net scale is *20%* of the gross scale
- ▣ Section Appendix 4 – (Modified) Taper Table
  - Defines *seven* standard taper regions (areas)
  - Language to more clearly define area boundaries
  - Language to list *"Idaho Region 6"* standard taper
  - Deletes reference to taper tables developed by USFS



Idaho Region 7

Idaho Region 1

Idaho Region 6

Idaho Region 2

Idaho Region 3

Idaho Region 4

Idaho Region 5

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