

Wood Products Manufacturing Center for Excellence

Training Idahoans for Idaho Jobs



Wood Product Manufacturing Center for Excellence

- **3 Industry Partners – 11 mills in northern Idaho**
 - **1406 jobs** (combined)
 - **\$607 million** annual revenue (combined)



Wood Product Manufacturing Center for Excellence

Industry needs

Replace an aging workforce

- 82% of licensed log scalers are over age 50
- Young people not entering the industry
- Loss of knowledge and experience in skilled jobs

High demand skill sets

- Automation requires new, advanced skills
- Lack of training opportunities
- 24% projected growth

Lack of skills certification

- No industry standards
- Rural areas – high cost, low access to training

Low pass rates for state licensing

- Current scaling exam pass rate was 35%



Wood Product Manufacturing Center for Excellence

Funding

- \$281,036 from WDTF grant
- \$93,678 from industry partners

Goals:

- 116 participants in 11 courses/3 skill areas
- Industry recognized credentials and licensing
- Job Advancement- living wage jobs

Job Skill Training:

- Log Scaling
- Programmable Logic Controllers
- Saw Filing
- Structured On The Job Training



Log Scaling

Spring 2014 course:

11 participants

- 45% pass 1st attempt
- 100% pass 2nd attempt

**State Licensing-industry
recognized credential**

Starting Wage

\$14-\$17/hour

Increased to

\$18-\$19.65/hour



Structured on the Job Training

- Trained Subject Matter Experts (SME's) key to effective On the Job training
- Spring 2014 11 SME completed course
- Second Class 22 September -11 completed course
- Led to Promotions



Lessons Learned

- Time in the log yard with hands on is key
- Printed copies of web material still works
- Early identification of students important to fill their production positions
- Choosing the right trainers just as important as the right students
- Trainers have to be given the time to train



Look into Blackboard

The screenshot shows a Blackboard course interface for 'Log Scaling Test Preparation (NEW)'. The top navigation bar includes 'North Idaho College', a user profile for 'Michael Weller', and 'Bb Home' and 'Content Collection' links. The left sidebar contains navigation options like 'Home', 'Welcome - Start Here', 'System', 'Lessons', 'Discussion Forum', 'Course Email', 'My Grades', 'Log Scaling Training Workshop Information', 'Resources and Reference Materials', 'Printable Tests', 'Learner and Technology Support', 'Discussion Board', and 'Instructor Resources'. Below these are 'COURSE MANAGEMENT' options: 'Control Panel', 'Content Collection', 'Course Tools', 'Evaluation', 'Grade Center', 'Users and Groups', 'Customization', 'Packages and Utilities', and 'Help'. The main content area features a 'Build Content' menu and a 'Welcome to the "Lessons" Area of the Course' message. Below the welcome message are six lesson folders, each with a yellow folder icon and the text 'Enabled: Statistics Tracking':

- Lesson 1 - Log Scaling Introduction and Theory**
- Lesson 2 - Safety Practices**
- Lesson 3 - Species Identification**
- Lesson 4 - Gross Scale Determination**
- Lesson 5 - Defect Deduction Method**
- Lesson 6 - Log Defects and Deduction**



Look into Blackboard

North Idaho College

Michael Weller 2

Bb Home Content Collection

Build Content Assessments Tools Partner Content

Lesson 4 Overview
Attached Files: Lesson 4 Overview.pdf (1433.700 KB)

Lesson 4 PowerPoint Presentation
Enabled: Statistics Tracking
Attached Files: Training Presentation - GROSS.pptx (3.887 MB)

Gross Volume Handout #1
Enabled: Statistics Tracking
Attached Files: Gross Handout #1.pdf (10.007 KB)
Example of proper cross measurements.

Tables I,II,III
The Tables are found in the Idaho Log Scaling Manual Pages 88-94.
The ILSM can be found in the Resources and Reference Materials section of the course menu.

Idaho Log Scaling Manual 2008 Edition
Attached Files: IdahoLogScalingManual2008 Edition (print)11.pdf (4.971 MB)
To be used as a reference.

Gross Scale Quiz

Control Panel
Content Collection
Course Tools
Evaluation
Grade Center
Users and Groups
Customization
Packages and Utilities
Help



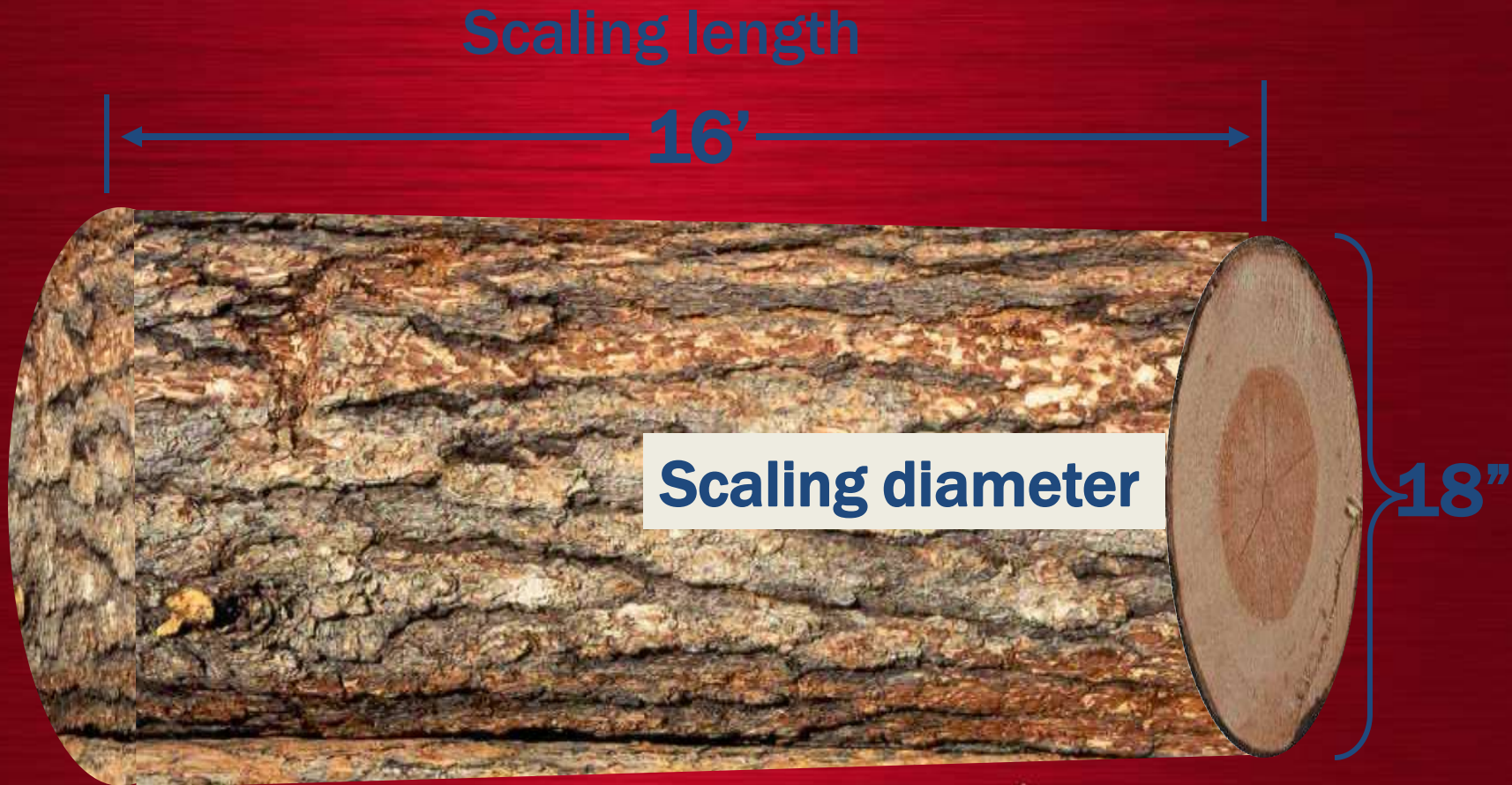
Basics of Scribner Log Scaling

**Determining
Gross scale**



Scaling Cylinder

Two measurements are required to determine the scaling cylinder of a log.



The scaling cylinder is a projected cylinder extending the scaling length of the log segment with identical diameters on both ends.

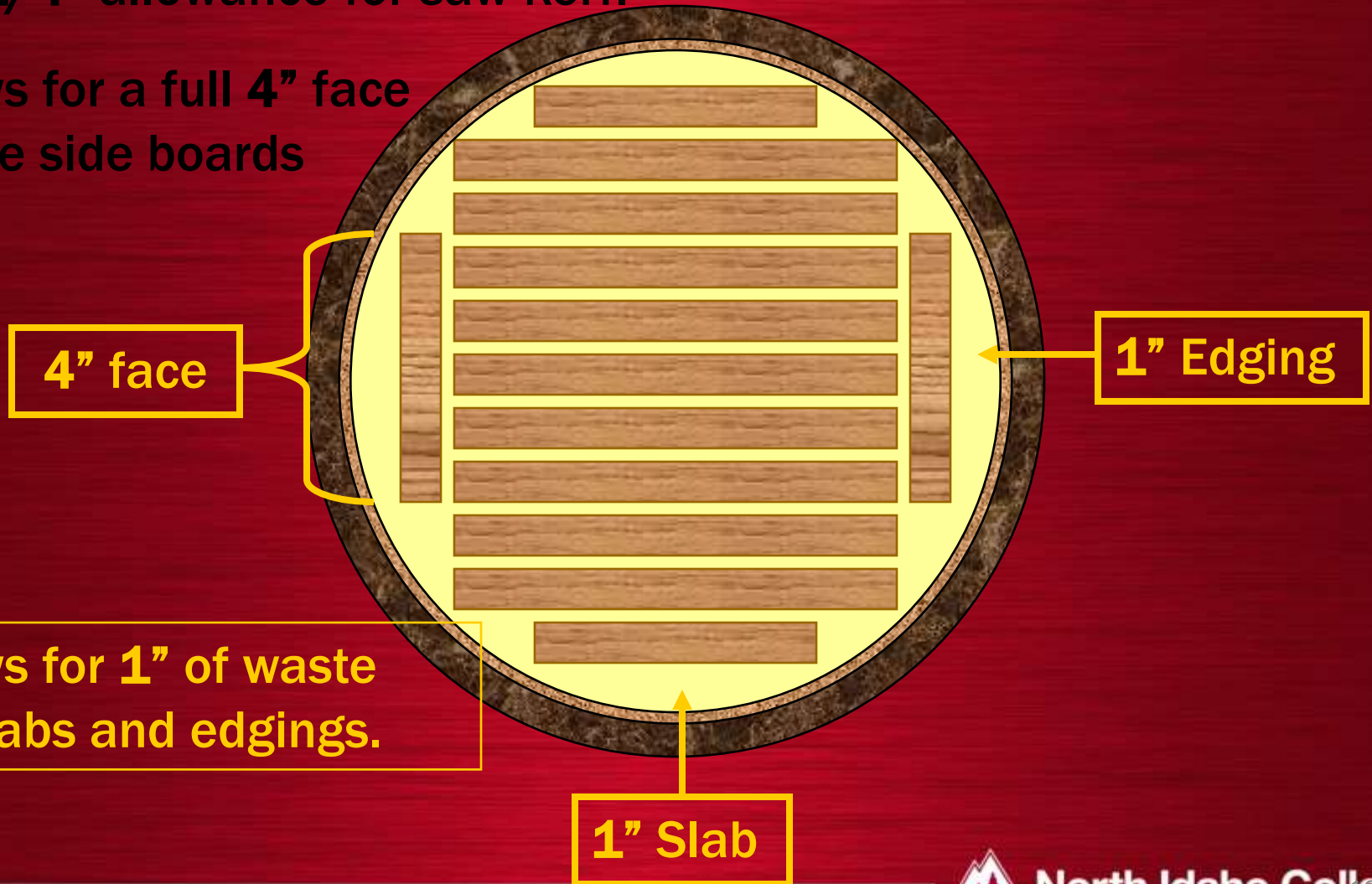




Scribner Log Rule Diagram

A series of **1"** thick boards was then drawn inside the circle with a **1/4"** allowance for saw kerf.

Allows for a full **4"** face on the side boards



4" face

1" Edging

Allows for **1"** of waste for slabs and edgings.

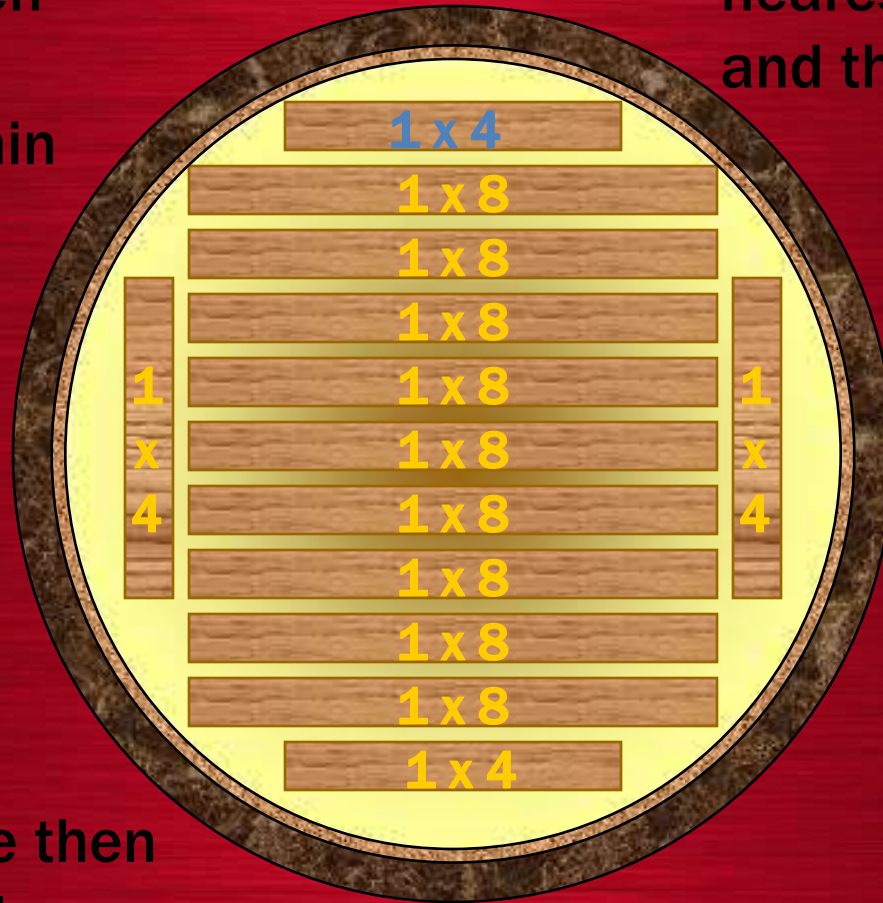
1" Slab



Scribner Log Rule Diagram

Board foot volumes are then calculated for each board within the circle.

Then rounded to the nearest ten board feet and the zero is dropped.



These volumes are then calculated for each length and diameter.

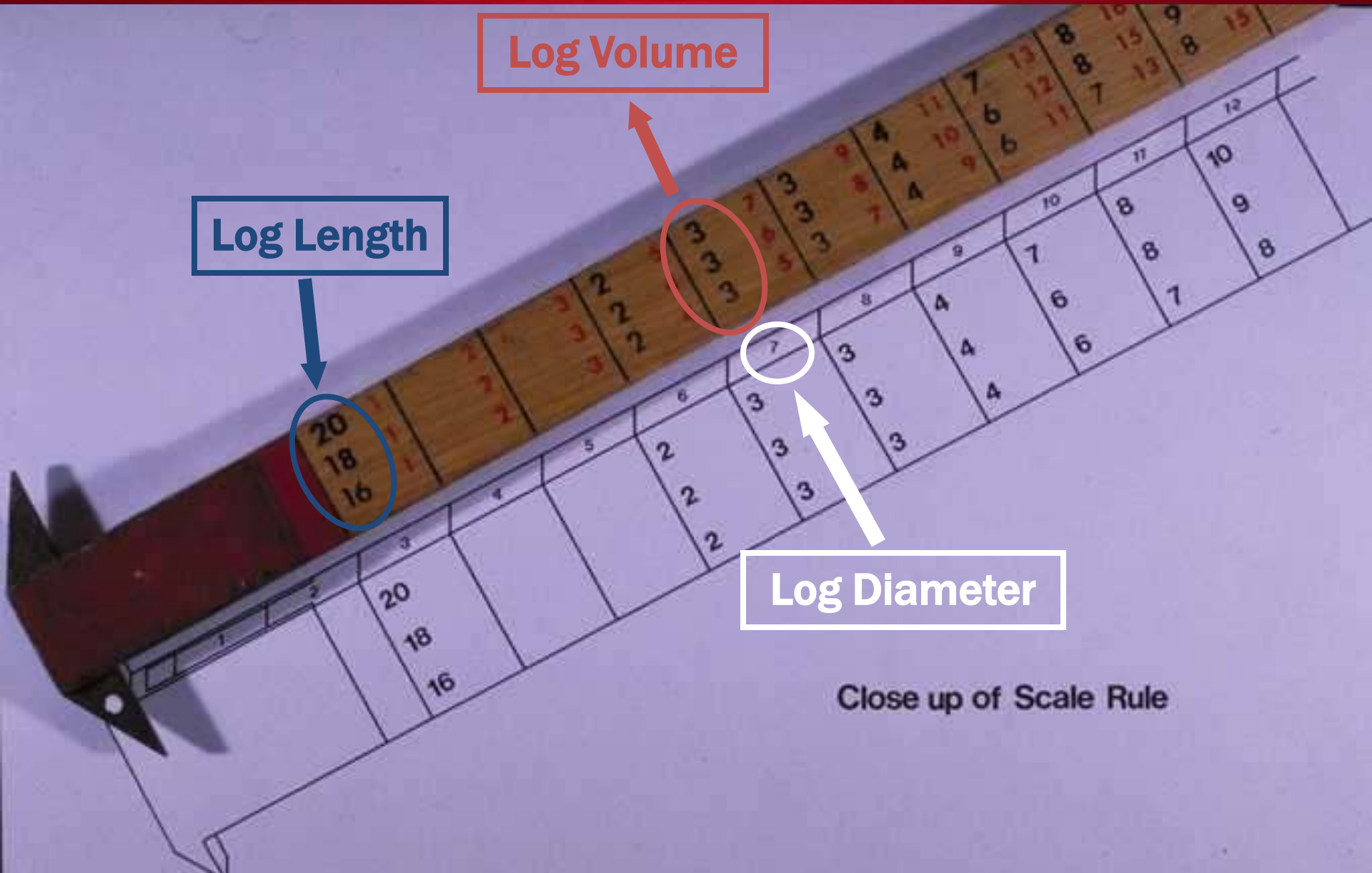


Coconino Scribner decimal "C" Volume Table (Page 3)

Diameter (in inches)	Log Length (in feet)																
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3										1	1	1	1	1	1	1	1
4					1	1	1	1	1	1	1	1	1	1	1	1	1
5		1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
6		1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
7	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
8	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3
9	1	1	1	2	2	2	3	3	3	3	3	3	3	4	4	4	4
10	1	1	2	2	3	3	3	3	3	4	4	5	5	6	6	6	7
11	1	2	2	2	3	3	4	4	4	5	5	6	6	7	8	8	8
12	2	2	3	3	4	4	5	5	6	6	7	7	7	8	9	10	10
13	2	3	4	4	5	5	6	7	7	8	8	9	9	10	11	12	12
14	3	4	4	5	6	6	7	8	9	9	10	11	11	12	13	14	14
15	4	5	5	6	7	7	8	9	10	10	11	12	12	13	14	15	15
16	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
17	5	6	7	8	9	10	12	13	14	15	16	17	18	20	21	22	23
18	5	7	8	9	11	12	13	15	16	17	19	20	21	23	24	26	27
19	6	8	9	10	12	13	15	16	18	19	21	22	24	25	27	28	30
20	7	9	11	12	14	16	17	19	21	23	24	26	28	30	31	33	35

14 0 board feet

Scribner log rule



Log Volume

Log Length

Log Diameter

Close up of Scale Rule

Log Lengths



Second cut logs

Short side to short side



Butt Logs

Measure from short side on the top

To the shortest point on the butt where the scaling cylinder emerges.





Incorrect length measurement !

Wood Product Manufacturing Center for Excellence Successes

- **Log Scaling class**
 - 11 new state licensed scalers
 - Wage increases \$1-\$4/hour
 - 10 currently enrolled
- **SOJT class**
 - 22 trained supervisors
 - Multiple promotions
- Wood Products COE Web site
 - www.woodproductscoe.org



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