## Primary Forest Product Assessment - Log Scaling Problem Set 2

1. Estimate total (gross) and sound (net) scale for the logs shown on the reverse using the Interagency Cubic Log Rule for cubic-foot contents and the Westside Scribner Log Rule for board foot contents. You may assume that all logs are circular in cross section. Produce a table (log tally) that includes log number (just number them consecutively), scaled diameter, scaled length, segment splits (if any), sound dimensions for Scribner, and total and sound scale for both cubic and Scribner.
2. Compute an average bd.ft : cubic ft ratio for total scale using results from challenge (1), compare it to the "theoretical" value of $12 \mathrm{bd} . \mathrm{ft}: 1$ cu.ft, and comment.
3. You intend to sell a load of logs to a potential buyer who has agreed to pay you \$625 / MBF (thousand board feet), if the scaling is done using Scribner decimal C.

| Log Num. | Top diameter (in.) | Length (ft.) | Bottom diameter (in.) |
| :---: | :---: | :---: | :---: |
| 1 | 20 | 24 | 23 |
| 2 | 25 | 33 | 29 |
| 3 | 30 | 44 | 36 |

a) Westside Scribner board foot scale,
b) Eastside Scribner board foot scale,
c) Which rule (East- or West- side) gives the most volume? Why?

Heart Rot


Deep lightning scar, affecting $3 / 16$ of circumference


Sweep and Heart rot


ESR 368 (E. Turnblom) - Log Scaling Problem Set

