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A VISUAL METHOD OF DISTINGUISHING LONGLEAF FROM SHORTLEAF AND LOBLOLLY PINE

Longleaf pine has an appreciably larger pith on the average than the other commercial southern pines—shortleaf, loblolly, and slash. That difference in the size of the pith affords the most definite means of distinguishing longleaf pine timbers from the others, although obviously the method can be used only on pieces cut from the center of the tree, such as boxed-heart timbers and ties, poles, and piling.

The pith, which is the small, dark, soft core at the center of the tree trunk, varies in size in all the species of pine. In vigorous shortleaf, loblolly, and slash pine the pith is larger than that of the smallest pith in longleaf pine. This overlapping of the species, however, can be largely taken care of if the second annual ring, which indicates fairly well the vigor of the tree during the previous year when the pith was formed, is also taken into consideration, and practically entirely so if the pith and second annual ring are measured at the stump end of the timber in question. (The second annual ring is used because the first ring is always large in longleaf pine.)

How to Use the Pith and Second Annual Ring for Identification

1. With a sharp knife carefully smooth the pith and surrounding wood on one end of the timber to be identified (the stump end if present and identifiable as such). If the pith or second annual ring is not clear, moisten the smoothed surface. If knots are present near the pith, satisfactory measurements cannot

be made, and the other end of the timber should be inspected.

2. With a caliper or rule graduated in hundredths of an inch measure the diameter of the pith, ignoring irregular projections. A low-power magnifying glass or reading glass is helpful in making the measurements.

3. If the pith is about the size of the lead in the ordinary lead pencil (0.08 inch) or smaller, the specimen is not longleaf (except in extremely rare cases), and no further measurement is necessary.

4. If the pith is over 0.08 inch in diameter, measure the diameter (not width) of the second annual ring around the pith. If the intersection of the two measurements falls below the curved line in the accompanying diagram the timber is not longleaf pine.

5. If the intersection falls above the curved line the timber may be any of the four species mentioned, unless it can be determined that the measurement is made at the stump end, in which case it is longleaf pine only. If this cannot be determined measurements should also be made at the other end which may show an intersection point below the line, thereby eliminating the possibility of the piece being longleaf pine.

The stump end of a southern pine timber can frequently be recognized by having a higher percentage of summerwood than the other end; irregularly shaped heartwood; annual rings irregular (not circular) in outline; and practically no large knots. Turpentine scars also indicate proximity to the stump end, and in addition restrict the log or timber to longleaf or slash pine.

Exceptions to the foregoing method occur only in occasional pieces. When a number of timbers are examined most of them will show definitely whether or not they are longleaf pine.

Graph for distinguishing longleaf pine from short-leaf, loblolly, and slash pine. The vertical scale represents the diameter of the pith in inches and the horizontal scale the diameter of the second annual ring. If the intersection of the line representing the diameter of the pith with that representing the second annual ring falls below the curved line the timber is not longleaf pine; if it falls above the line it may be any of the four southern pine species unless measurement is made at stump end, in which case it is longleaf pine.

