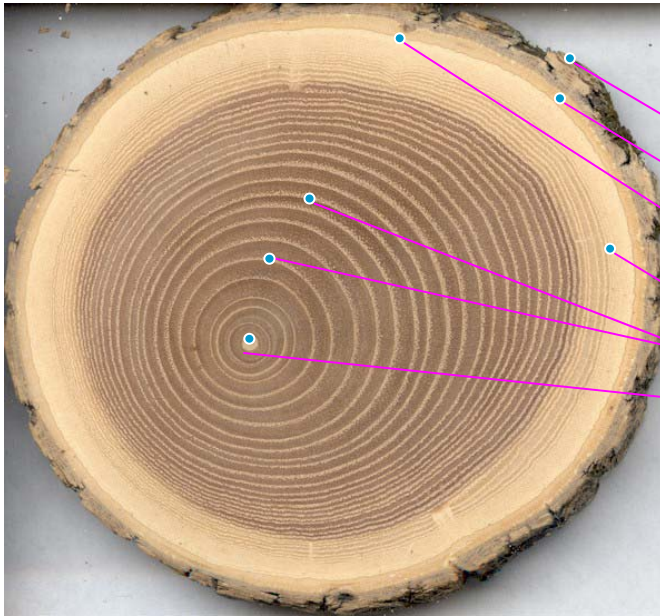
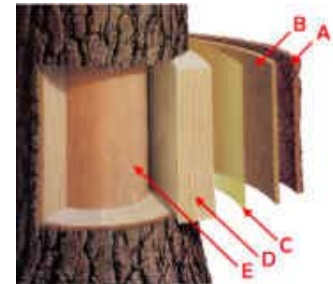


Tree Cookie: A Slice of a Tree



Trunk Sections:

- Outer Bark
- Inner Bark (phloem)
- Cambium
- Sapwood (xylem)
- Growth Ring
- Heartwood



Descriptions

Outer Bark: Dry dead cells which protect the rest of the stem.

Inner Bark (phloem): A live spongy layer just inside the outer bark that moves sugars and other substances from the leaves to the stem, roots, and other places where they are needed. Eventually grows out to form part of the outer bark.

Cambium: Just inside the bark (but outside the wood), is a single layer of cells. It repeatedly divides to form all of the new wood and bark.

Sapwood (xylem): Makes up everything living beyond the cambium in the tree trunk, branches, twigs, and woody roots. This wood is made up of fibers which add strength & hollow tubes of different sizes. These tubes are like straws that conduct water & minerals from the roots to the leaves.

Growth Ring: The cambium produces a new layer of wood in diameter around the tree each year. In the late spring/early summer it grows rapidly (the light portion-called early wood) and during the late summer/early fall it grows more slowly (the dark portion-called late wood).

Heartwood: As a stem ages and grows, eventually some of the wood in the center dies and becomes heartwood. It is a darker in color than the Sapwood and supports the tree.