Toomer’s Oak Growth Rings Counted

Growth rings from the base of the Auburn Oak at Toomer’s Corner (live oak, *Quercus virginiana*), formerly adjacent to College Street, support the previously reported planting of the trees in 1937 (link to update). Faculty in the School of Forestry and Wildlife Sciences and the Department of Horticulture independently counted 81 growth rings in two directions from the center of the trunk. Growth rings, also referred to as tree rings and annual rings, are comprised of alternating bands of early and late wood that often appears different, i.e. light and dark, and typically constitute the growth in trunk diameter that occurs in one year. The center one inch of the trunk cross section was split and growth rings were not clearly delineated. This growth probably occurred over two to four years making the trees 83 to 85 years old. Between 1937 and 2012, the trees formed 75 growth rings. (A growth ring would not have formed in 2013 by April when the trees were removed.) Images of the trees from 1938 and 1939 show two trees that were 8 to 12 feet tall, an expected range in height for field-grown trees that were 8 to 10 years old.

A section of wood about 6 inches in diameter from the base of the Auburn Oak at Toomer’s Corner formerly adjacent to College Street was cut for determining the tree’s age.
The section of wood from the tree was recut and sanded by the AU Facilities Carpenter Shop.

Applying penetrating oil to the wood enhanced contrast and made it easier to quantify growth rings. The oil will also lessen cracking of the wood.
Cross-section of the base of the Auburn Oak at Toomer’s Corner formerly adjacent to College Street

Cross-section of the base of the Auburn Oak formerly at Toomer’s Corner showing alternating light and dark concentric circles that constitute the growth rings.
The section of wood includes part of the scar from the base of the oak formerly adjacent to College Street. The scar resulted from the tree being hit by a drunken driver in the 1990s.

Note the area of darkened wood adjacent to the injury where tylosis occurred in response to injury or as protection from decay. Tylosis is a physiological process where xylem vessels are blocked with waste products of photosynthesis. Also note how xylem (wood) has formed over part of the scar. Has the tree lived long enough, the scar would have been completely hidden by wood.
The early stages of decay resulting from an old injury are evident in the amorphous area of light and dark wood.