Tree Cookie Cross Section

For Use With PLT Activity 76: Tree Cookies

The following codes are found on each page for placement of each quadrant:

ULQ: Upper Left Quadrant

URQ: Upper Right Quadrant

LRQ: Lower Right Quadrant

LLQ: Lower Left Quadrant

Print each page on paper size of your choice and tape the quadrants together.

Notes about this tree:

Species: ponderosa pine (*Pinus ponderosa*)

Age: 102

Birth Year: 1893

Death Year: 1995

This ponderosa pine grew in northwest Nebraska where it experienced a variety of environmental and forest conditions. Many coniferous tree species, including ponderosa pine, often regenerate prolifically in forest openings and this tree was no different. Early on, the ring widths show average growth for a tree in arid northwest Nebraska but began to narrow considerably when the tree was about 20 years old. That was caused by the presence of too many trees in this area of forest, all competing for the same limited supply of resources. Tree growth decreased and the tree suffered from overall lower health as a result of that crowded forest condition. However, in 1927 this area of forest was harvested through a timber sale and some of the overcrowded trees were removed. That harvest reduced competition for natural resources and this tree had increased health and greatly increased growth as a result. Not long after the harvest, the drought of the 1930s struck and once again reduced available resources for this tree, as evidenced in the reduced ring widths. Although this tree did experience some better years following the drought, the forest continued to become more crowded (remember prolific regeneration) and unhealthy until another harvest occurred in 1995, when this tree was removed through a timber sale allowing the remaining trees to continue on with improved health and vigor.