

## Handout H16-2. A Tree's Story Key.

This is an example for Tree POT-Out07. For answers specific to all of the photo posters in your trunk, see the ***FireWorks Cookie Book – Low-severity Fire on the Plumas National Forest*** (in the trunk and also in the electronic folder **Fire History Materials/CookieBook**).

Species: **Ponderosa pine**

Cookie Number **7**

1. How many years of history does your tree cookie cover? **1835-1518= 317 years +1 to account for both earliest & most recent rings = 318 years**
2. On a separate page:
  - Sketch the outline of your tree cookie.
  - Label the sketch with the dates of the earliest and most recent growth rings.
  - Draw an arrow to each fire scar and label it with the date of the fire.
  - Calculate the number of years between each pair of fire scars. Write it in the space between each pair of arrows.
3. How many *low-severity fires* scarred your tree? **5**
4. How many *fire intervals* are recorded on your tree? **4**
5. What is the average interval between fires? **57.9** years (If you only have 1 scar, go to the next step.)
6. Wide growth rings show years of fast tree growth, when moisture, sunlight, and nutrients were plentiful. Narrow rings show years of slow growth caused by drought, disease, injury, shading, or crowding by other trees. In what years did your cookie show fast growth?  
**Around 1590**  
In what years did it grow very slowly? **After the last fire, 1819-1835**
7. Were the years right after fire usually good or poor for growth? **Both**  
What might be some reasons? **More or less competition, damage from loss of cambium and introduction of pathogens, short-term increases in nutrient availability**
8. Did your tree record fewer fires after 1900 than before? **No record in the 1900s for this tree.** If so, what might be some reasons? (If your tree died before 1900, go to the next question.)
9. Could a tree be damaged by lack of low-severity fire? Explain why or why not. **Yes. Competition from other trees may increase, reducing sunlight, water, and nutrients available to the tree. Ladder fuels may increase likelihood of lethal fire.**

