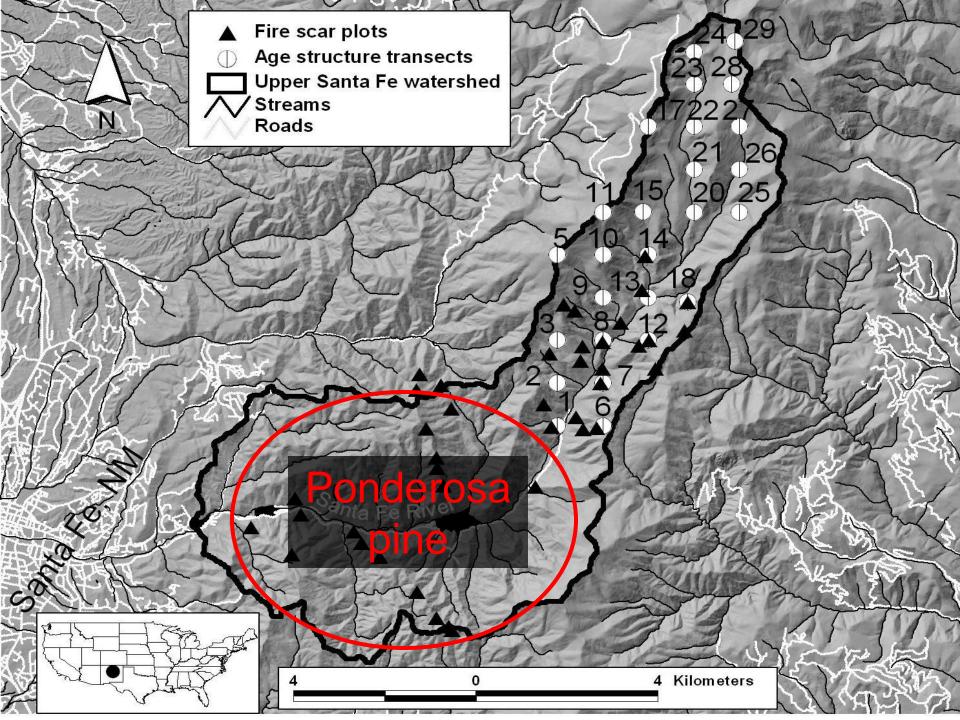
### A 700-yr history of fire: Santa Fe watershed



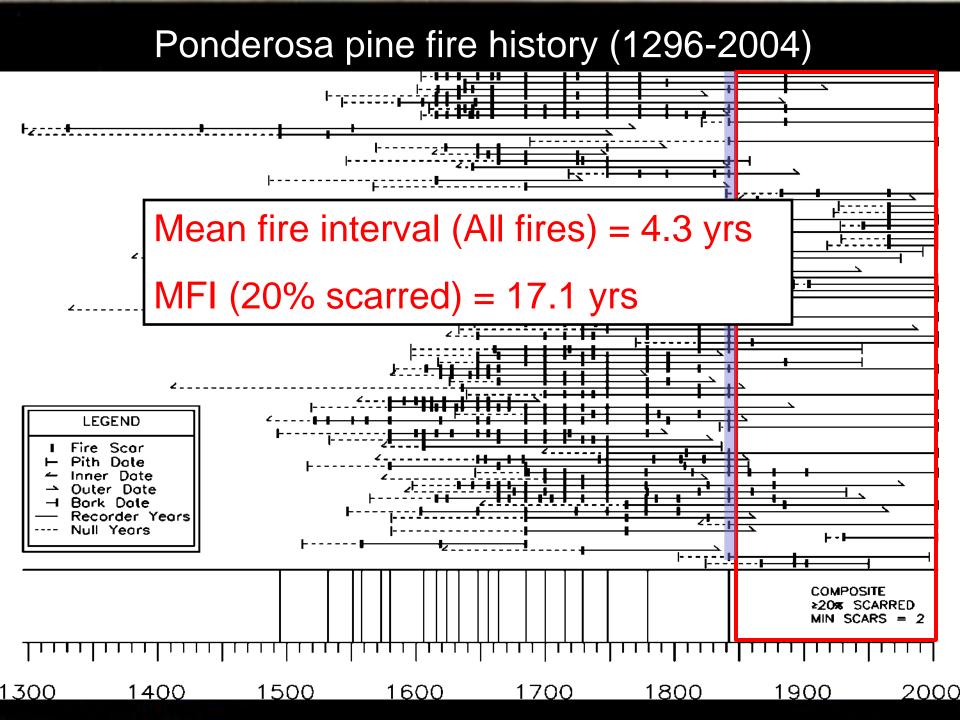
Ellis Margolis<sup>1</sup> & Jeff Balmat<sup>2</sup> <sup>1</sup>Laboratory of Tree-Ring Research, Univ of Arizona <sup>2</sup>National Park Service Tucson, Arizona





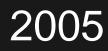
# Fire scar sampling

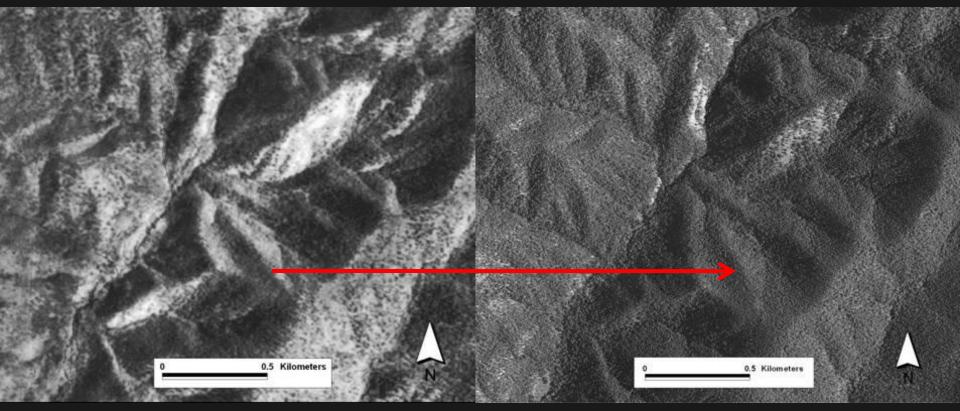




Increased forest density after fire suppression

#### 1935







## Conclusions

- Low severity fire burned frequently in the Ponderosa pine forest of the Santa Fe watershed since at least the early 1300's.
- Late 19<sup>th</sup> century land use changes and 20<sup>th</sup> century fire suppression excluded fire for the last 160 yrs, increasing both forest density and the risk of a catastrophic crown fire.
- This fire history validates the assumptions on which the restoration treatments were based

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