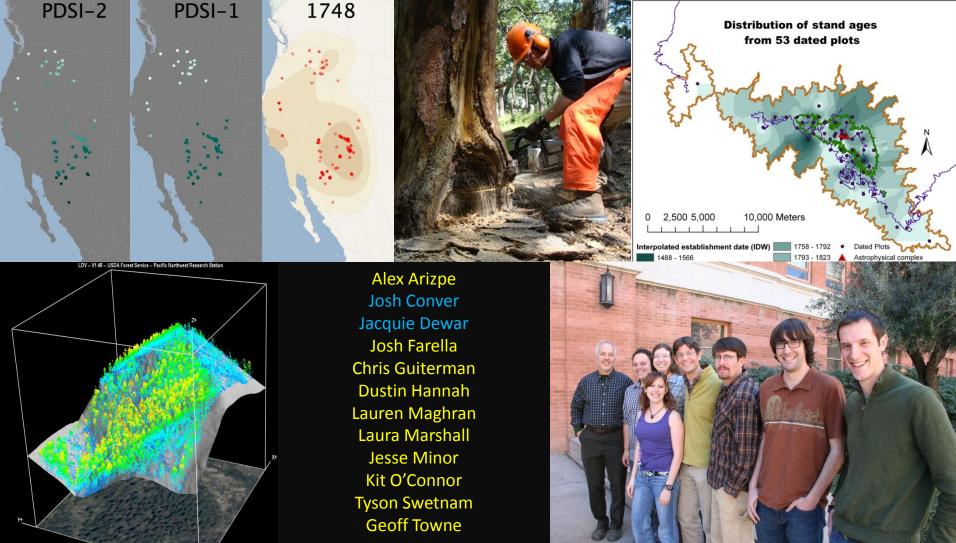
Fire history in a changing world Don Falk, students, and collaborators





Arguably the central scientific <u>and</u> management challenges of our time:

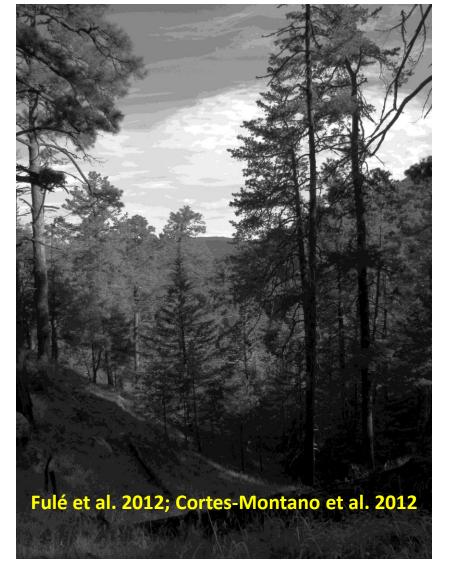
How will organisms and ecosystems adapt to rapid reorganization of the Earth system? How will these changes affect approaches to ecosystem management?

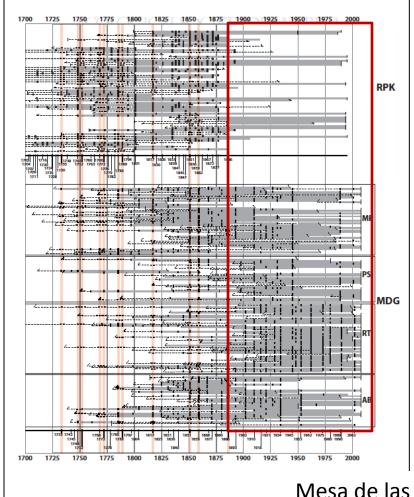


Sites in Mexico demonstrate the fire regimes that would exist currently in the SW Rustler Park,

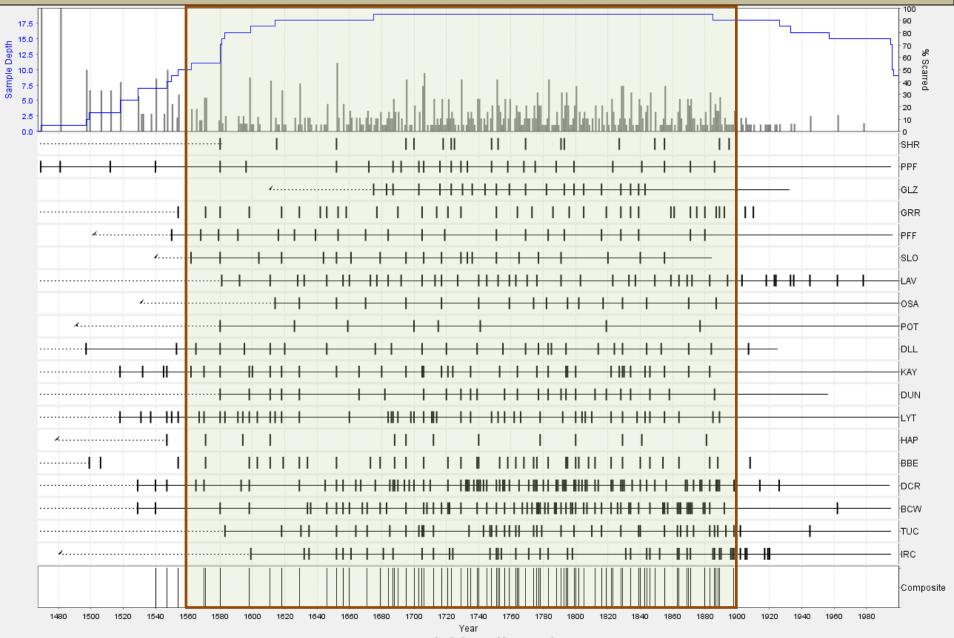
Chiricahuas, AZ

Guacamayas, SON

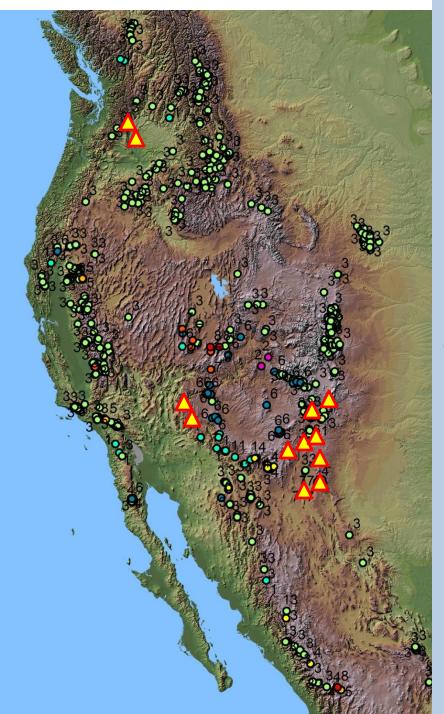




Master fire timeline for 19 central and eastern Oregon sites



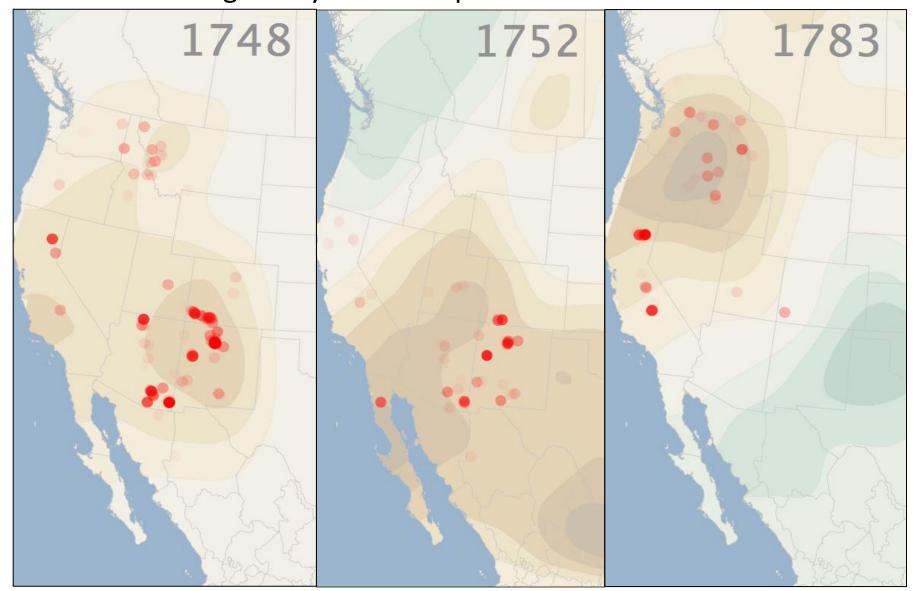
Heyerdahl, Falk et al., in prep.



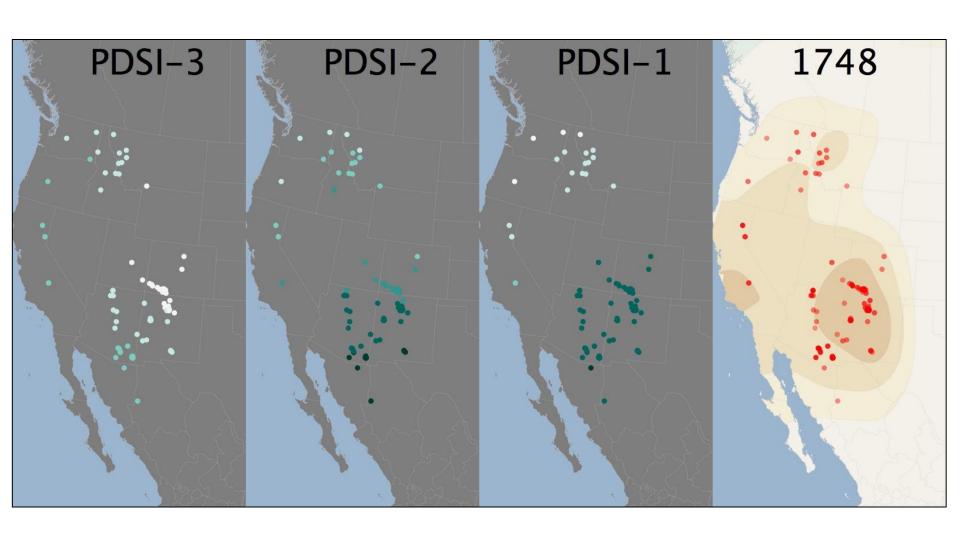
Fire and Climate Synthesis (FACS): A major new network for continental paleoecology

- Data from 886 crossdated fire-scar sites
- 3,248 year record
 (1248 BCE 2011 CE)
- 7 primary forest types
- 28,931 fire site-years

Fire tracks the spatial patterns of annual drought closely, creating regionally coherent patterns across WNA



Preceding years' climate can set up fire years 2-3 years in advance



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