

Reconstructing late-1800s landscapes of the Uncompahgre Plateau using the General Land Office Surveys

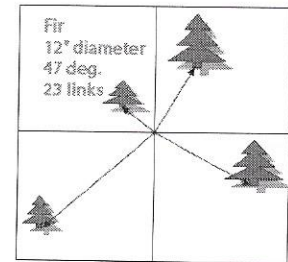
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GOAL

- Use late-1800s land-surveys to provide landscape-scale data to complement stand-level rapid assessments to further inform ecological restoration on the Uncompahgre Plateau

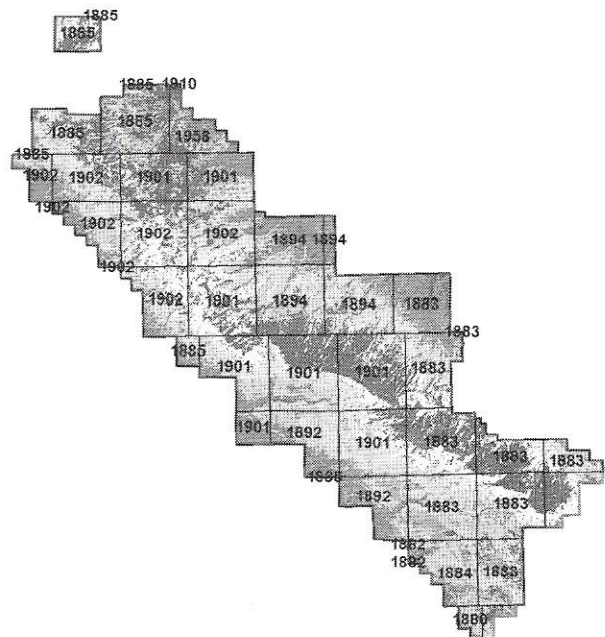
THE GENERAL LAND OFFICE (GLO) SURVEYS

- Rectangular surveys: townships 6 miles X 6 miles with 36 sections each 1 mile X 1 mile
- Data
 - Bearing trees at marked section corners
 - Section-line descriptions of dominant trees & shrubs in order of abundance
"Timber heavy pine and spruce. Dense undergrowth of oak"
- Can use these data to reconstruct:
 - Tree density
 - Tree basal area
 - Tree species composition
 - Tree diameter distributions
 - Understory composition (dominant shrubs) and relative abundance
 - Fires: severity, patch size, fire rotation
 - Location of ecotones (e.g., boundary from subalpine forest into grassland openings)



THE UNCOMPAHGRE GLO PROJECT - 2014 PROGRESS

- 2014 startup funding from Colorado Forest Restoration Institute—Thanks to Tony Cheng
- Collab. with Dan Binkley, Bill Romme-CSU
- Study Area
 - Plateau section-Uncompahgre NF
 - Mostly surveyed 1883-1902
- Entered data into GIS in Fall 2014
 - About 650,000 acres and 28 townships
 - 3,507 bearing trees
 - 4,070 section-line descriptions across 2,011 miles of section lines
 - Covers
 - Pinyon-juniper woodlands
 - Ponderosa pine forests
 - Mixed conifer forests
 - Spruce-aspen forests



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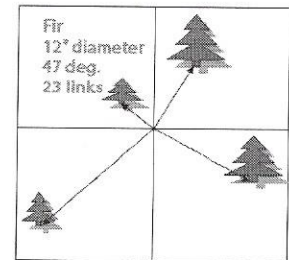
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