

Pinyon-Juniper Restoration Demonstration Project at Mount Trumbull

Project Summary

Goals

- Test general restoration prescription at two sites (20 acres each)
 - Reduce soil movement
 - Increase understory diversity and productivity
 - Reestablish historical tree density
 - Reestablish historical tree species composition

Design and Prescription

- Treated and Control units
 - Retain pinyon and juniper trees > 25 cm
 - Replace dead presettlement evidence (2:1 post-settlement per dead evidence)
 - Lop and scatter slash
 - Seed with native grasses, forbs, and shrubs

Measurements

- Pre- and Post-treatment measurements
 - Woodland structure
 - Surface fuels
 - Understory cover and composition

Results

- Reestablished historical overstory density and composition
- Some success of seeded species
- Minimal understory response

Conclusions

- May need more woody material (slash) than was available as a result of our prescription
- Not a one-size-fits restoration prescription
- Response likely depends on:
 - Historical conditions
 - Soils
 - Weather patterns
 - Plant composition

Long-term Monitoring

- Will remeasure plots and analyze responses on 5-year cycle

