

**Building Capacity for Resource
Sustainability through
Collaboration**

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Apache Sitgreaves National Forest







Sustainability Concepts

- Improve herbaceous production
- Pay attention to regrowth and recovery
- Increase plant species diversity
- Distribute livestock grazing pressure
- Reduce habitat fragmentation

Sustainability Concepts

- Build capacity for wildlife while maintaining working landscapes



Stakeholders



On Stewardship

- “And therefore there’s lots of different goals. It’s not just cattle goals, or my bottom-line goals... it’s fish and frogs, antelope and deer, whatever else is going on, plus resource health, and um, perennial natives, that’s a large factor.”

On Stewardship

- “I guess our management philosophy is sustainability.”
- “I probably wish I knew more about how to bring back native species and create better range out there. I think I've done quite a bit. I think more can be done.”

Grazing Management

- Adaptive management integrates science (experimentation) and stakeholder participation (experience) in a recurring, inductive approach to managing rangelands.

Kinds of Data

- Precipitation
- Actual use
- Animal condition and behavior
- Waters
- Utilization/stubble heights
- Resource trend data

Basic Tools of Grazing Management

➤ Grazing intensity

stocking rate

➤ Frequency of grazing

length of grazing and rest periods

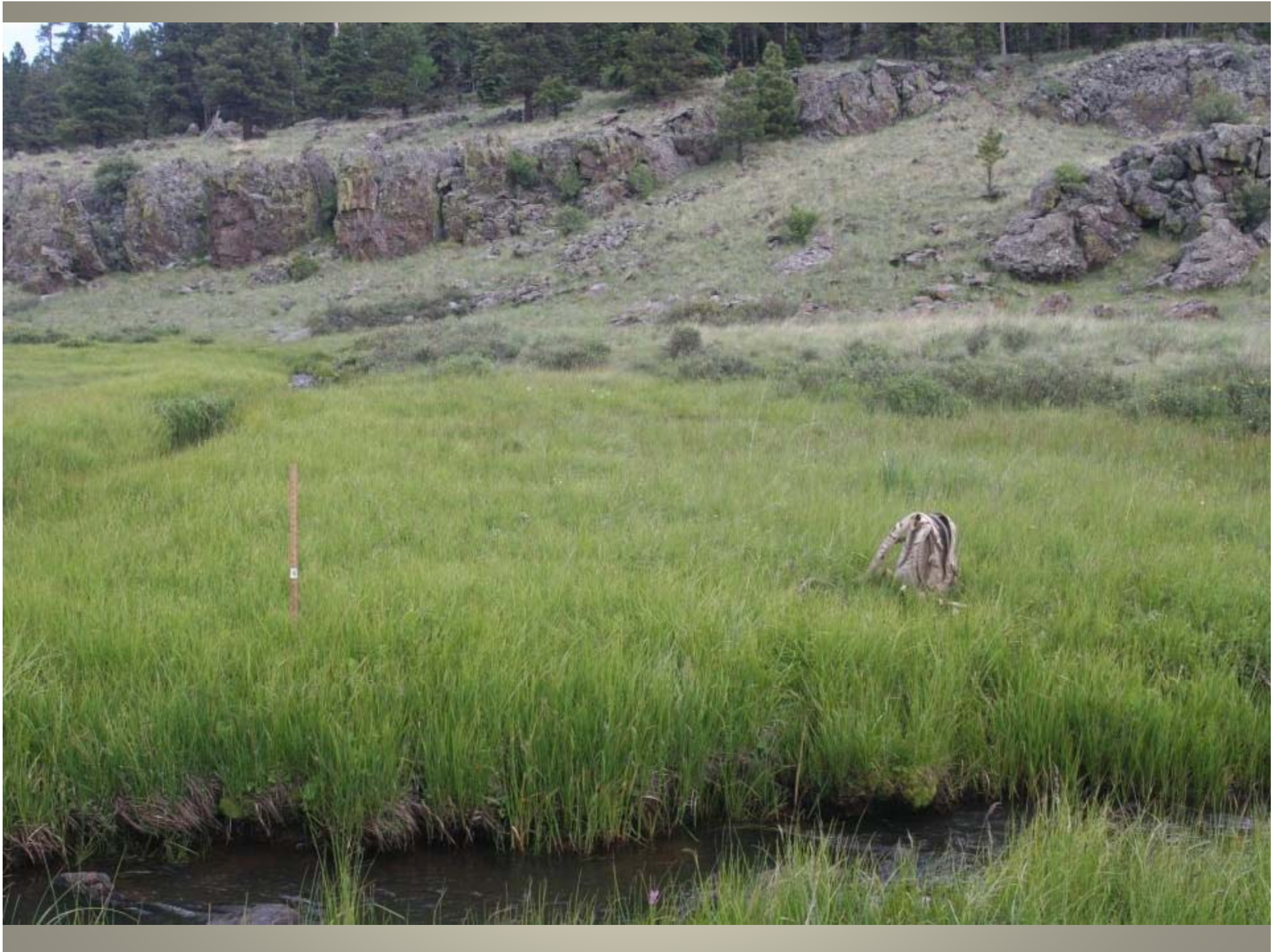
➤ Season of grazing (timing)

plant growth, animal diets, multiple uses

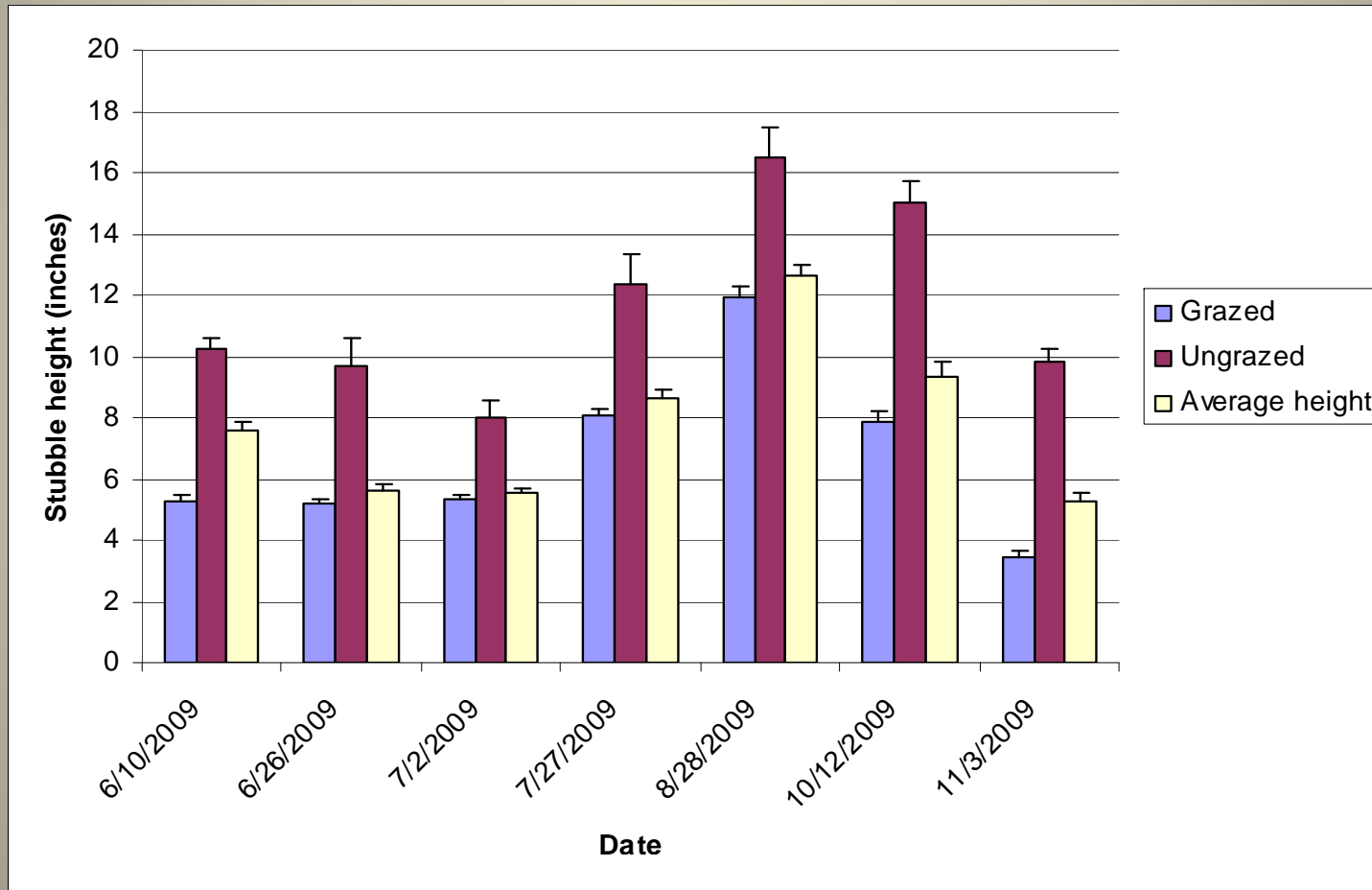
➤ Animal distribution

grazing efficiency, multiple uses





Stubble Height of Beaked Sedge in Riparian Flood Plain



Multiple Indicator Monitoring

- measure 10 indicators along each stream reach in one protocol



Three indicators provide data from which short-term livestock (or other herbivore) use information can be derived

- Stubble height
- Streambank alteration
- Woody species use

Seven indicators provide data from which resource trends can be derived:

- Greenline vegetation composition
- Woody species height class
- Streambank stability and cover
- Woody species age class
- Greenline-to-greenline width
- Substrate Size
- Residual pool depth and pool frequency

MIM Technical Workshops



- Scheduled for week of August 15th in Springerville
- Emphasis on woody vegetation



1993

2010









Funding Sources

- RREA
- University of Arizona Cooperative Extension
- Forest Service
- ACGA
- Quivera Coalition (FS)
- National Riparian Service Team
- NRCS

