2011 Leopold Award

Rodney, Arlene, Randy, Gina, Beau and Kahla Mathewson
RGM Corporation
Background

- Between Sidney and Potter, NE.
- Started by Rod and Arlene Mathewson.
- RGM Incorporated in 1976 when Randy returned from college.
- Beau returned in 2005 after graduating from UW.
- Transition from lease to ownership/generational.
- We put together our ranch through purchases over time. Much of what we have bought needed years of rehabilitation.
- 2011 we switched from cow/calf, replacement heifer and bull development to yearling operation.
Quick Facts

• 4200-4600 feet in elevation
• All types of soils: clay, sand, shallow limy, silty
  15-17” of precipitation annually
• Cool-season dominated range
• Sedges, wheatgrasses, needlegrasses are key species
• Available AUM/ac. range from 0.40 to 0.70
• Mix of CRP, farmland, and rangeland in area
Conservation and Stewardship

- Continue to make things better for all users
- Leave things better than you found them
- Does not happen overnight; takes vision, patience, and determination
- Cooperation with agencies is key
- Works with natural processes
- Is an inherent part of a good grazing system
- Is sound business
Key Operational Concepts

• Rotational grazing
• Fencing, pipelines, watering facilities
• Education and outreach; agency cooperation
• Technology
• Monitoring
• Invasive species management
• Land improvement and remediation
Rotational Grazing

• Higher stocking density for shorter duration
• We rotate on three- and four-year rotations
• Five grazing units, each with five sections
• Graze from May 5 to September 10
• Never in a pasture more than twice in three years, nor for more than 45 days (usually 30)
• Erosion is eliminated, past abuse is reversed
• Was not possible when we rented, and before pipeline, water, and fencing improvements
• Diversity increases exponentially, as does cover
• Seeing is believing!
Seeing is Believing: Fence line Comparison May 15, 2012 Photo

Rotational system  Season long grazing
Rotational Grazing

- Impossible without adequate, well-positioned water
- Never graze the same pasture at the same time of year two years in a row
- Utilize forage most efficiently; ~ 30% increase in stocking rate WHILE using less forage
- Diversity greatly increases as does ground cover
- Allows flexibility within set parameters
- Manage for benefit of land -- Always
- Matches cattle to forage resources
- (Small) Con: the same is true for weeds; must monitor every pasture multiple times every year
- Long-term investment, labor and capital intensive
Rotational Grazing Continued

• Requires NRCS, clear objectives and planning
• Requires ownership or long-term lease or progressive owner
• Improvements for rotational grazing allow any type of livestock to be grazed at any time of year
• Scalability
• Rest time is key
• Creates habitat for all inhabitants of the ecosystem -- from microorganisms, to insects and birds, to cattle and large ungulates
• Economically AND environmentally superior
Fencing + Water = Grazing System
Water

• We construct 25’ bottomless tanks
• Match well capacity with stocking expectations and storage capacity
• Move away from windmills to submersible and pipeline
• Smaller tire tanks can be used in pasture edges
• Water sources should be no more than ½ mile apart
Water is THE key!
Drought

• Drought conditions are mitigated by dependable (i.e., electric), well-spaced water and a planned grazing system
• Drought impacts a herd for years
• Grazing mismanagement is magnified with drought
• Look at best/average/worst case scenarios before start of grazing season
• Dynamic of “Subsidizing” a cattle herd with harvested feed and grain has dramatically changed since 2002
• Drought impacts can be mitigated with deep culling and lower stocking rate expectations
• Decreasing stocking rate and resting pastures longer during drought has dramatic positive effects when normal conditions return
You Are a Teacher

• Use your land and management practices to show others how grazing is sustainable; rangeland plants evolved with grazing.
• Every student is critical.
• We work with the Rocky Mountain Bird Observatory, and Extension and other agencies for field days and research lands. People SEE how proper grazing and subsequent improvements benefits the environment.
• Private enterprise is the key to stewardship.
Education

• Education can be as little as talking to your neighbor on a plane. People want to know where their food comes from.

• Be cool. Politely listen and then use your science-based knowledge of our industry to educate.

• If people know our narrative, it is that much harder for outside, special interest groups to push their radical anti-ag agendas through via ballot measure.

• Pride, heritage, and stewardship are the values to which we adhere.
Education, Outreach and Cooperation

• Your education is also important.
• Seminars and continuing education help you do what is best for your land and circumstances.
• Many of the practices we use were learned from other producers through successes and failures. Extension research is one of the most valuable resources we have.
• Never stop learning!
Technology

• Record keeping, Information gathering, Information synthesis
• Technology is used to gather and organize information
• Never before has technology been more cost effective or easier to use
• Communication and information gathering technology
• Indispensible management tool
GPS

• GPS technology allows us to catalog, manage, and monitor key areas, points of interest, and invasive species locations
• Not impossible without GPS, but very burdensome
• Enhances long-term memory
• Aids in visualization and prioritization of projects
• Very affordable and easily utilizable
• Infinite possibilities
Record Keeping

• Records are made much more usable and customizable with database programs.
• Abstract data become actionable.
• Performance records and grazing records are absolutely essential.
• Customize database with photos, links to NOAA data, whatever you can imagine.
• UNL and other extension services can help you get started.
• Keep photos, waypoints organized.
• Keep relevant data that helps make you more efficient.
Future of Technology

• More integrated
• Increasingly better and cheaper
• Tool for demonstrating “value” of ranch
• Shorter learning curve
• Drones
Invasive Species Management

• Invasive species are not a problem on native range; problem areas are usually less than 400 sq. ft, and can be as little as a single plant
• Disturbed areas, wet areas, seeded areas and farmland/pasture interface are locations where weeds can thrive
• **Canada Thistle, Scotch Thistle, Field Bindweed, Curly Dock, Lupine, and Mullein**
• Constantly vigilant
• GPS technology is invaluable to ISM
Weeds

- Spring, mid-summer and fall seek and destroy campaigns
- Simple Equipment: Pickup Mounted 200 Gal. Sprayer and ATV with 50 Gal tanks, boom, GPS
- Our objective is eradication
- Most all of the original patches have been eradicated, but new plants emerge in drainages
- Educate neighbors about noxious weeds
- Chemical selection is important; weed species AND surrounding species must be considered
- Keep records with GPS of spot treatments, photos, etc. and continue to monitor
Land Enhancement

• 25K+ trees and shrubs planted
• Returning farmland to native grass and forbs
• Creates habitat and diversity
• Cost-share programs
• NRCS and NRD are instrumental
• Lasting legacy
• Climax communities are the ultimate objective
• Prescribed burns are an effective tool
Thank You

• Responsible grazing is the cornerstone of our environmentalism.
• Use technology to suit your needs.
• Tell your story.
• Strive for ecological climax communities.
• Ranchers are environmentalists.
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