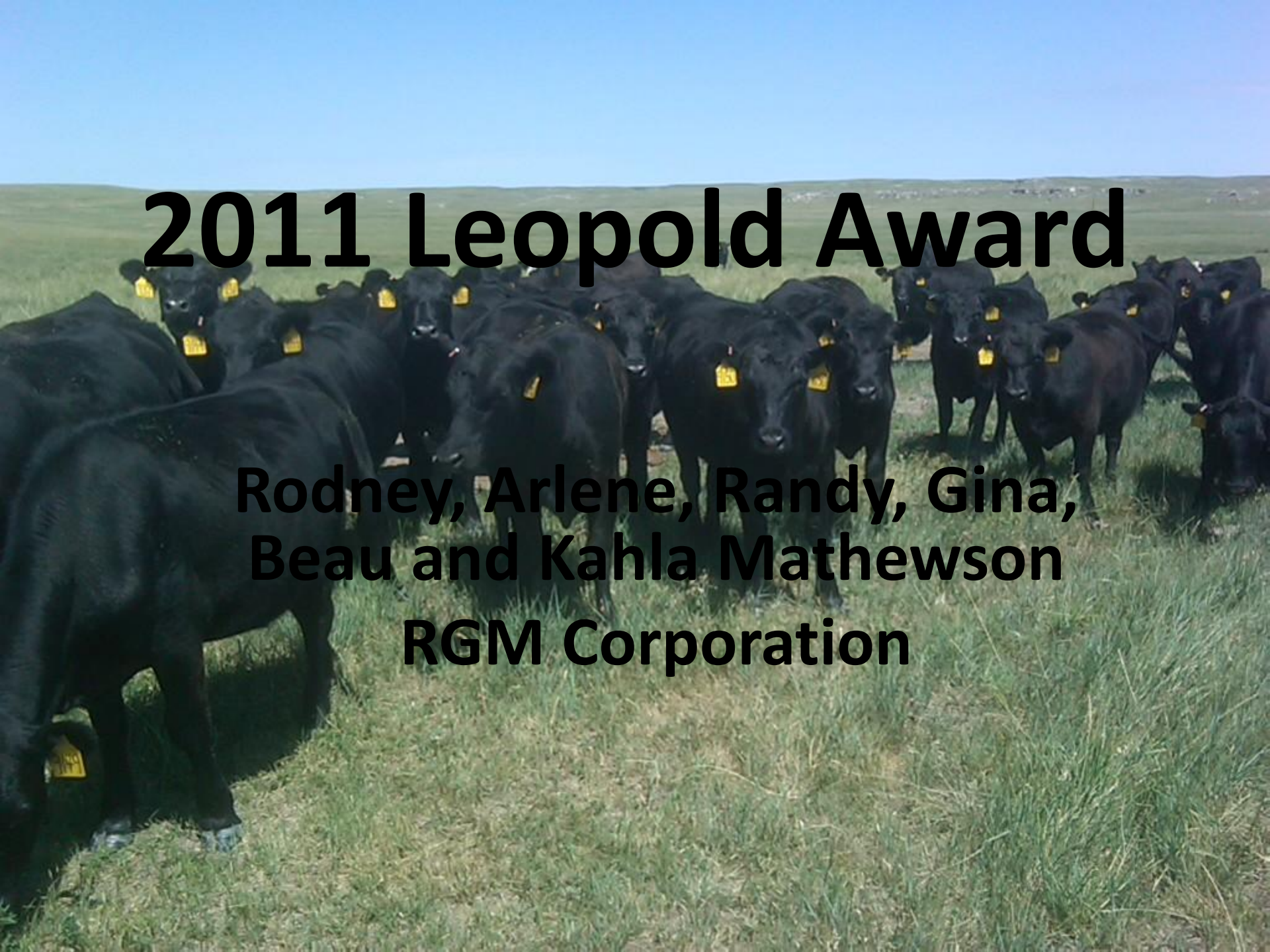


2011 Leopold Award

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

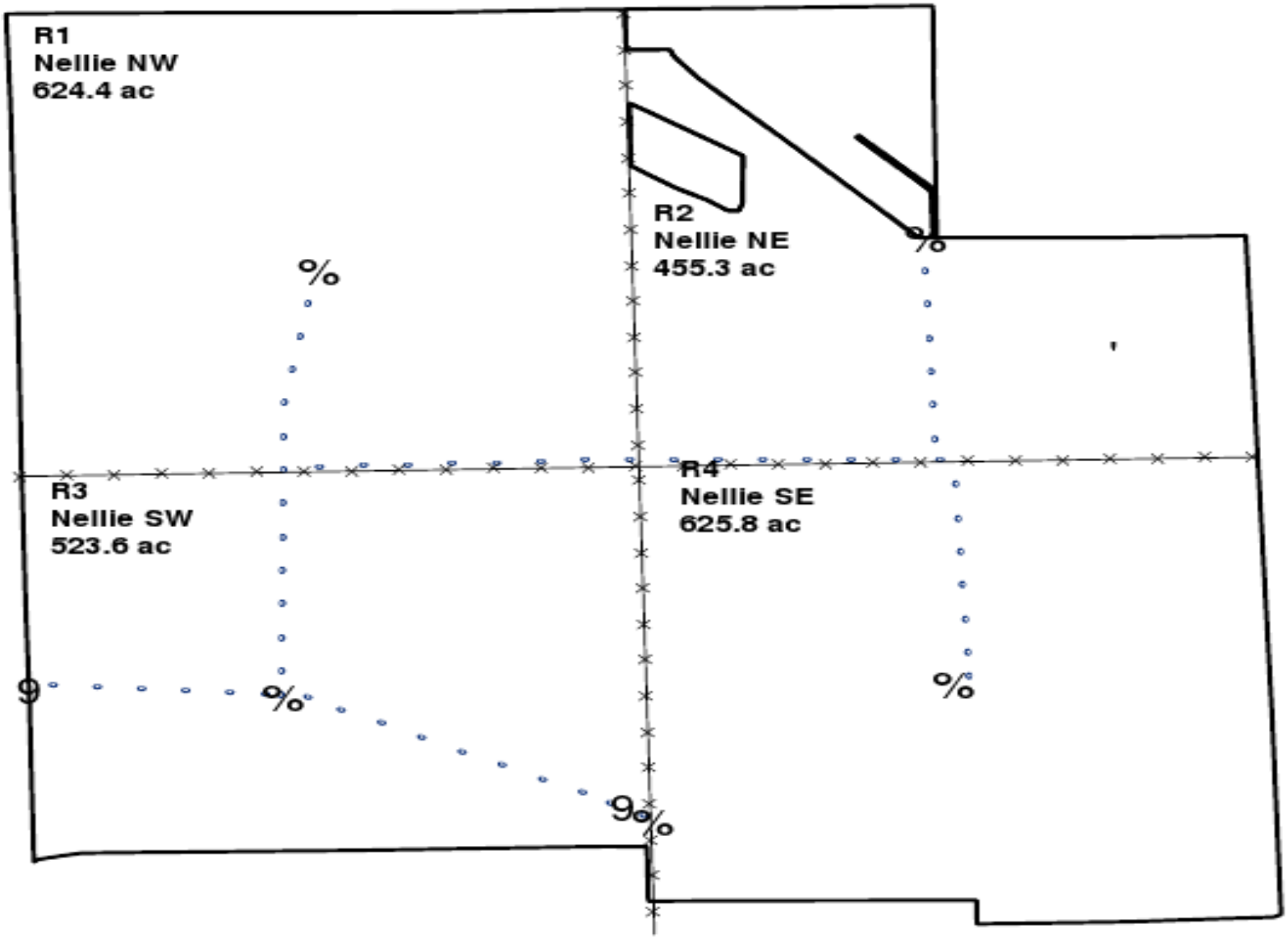
Rotational Grazing

- 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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- Randy Mathewson: rgm@prairieweb.com