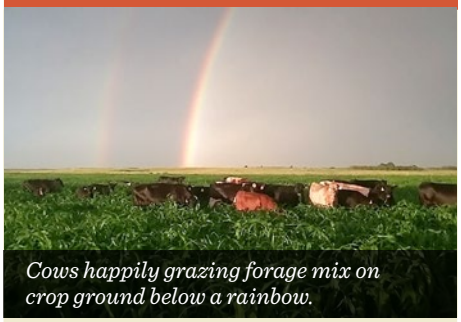
2026

Kurt Dale, Dale Family Farms

GRAZING CASE STUDY

FARM AT A GLANCE



Cows happily grazing forage mix on crop ground below a rainbow.

County	Comanche, KS
Acreage	1700 acres (owned & rented, crop ground & native range)
Herd Size	100 head fall-calving herd; custom grazing 175 head yearling feeders
Grazing Practices	Rotational grazing of native range and crop ground, including forage mixes

ROTATIONAL GRAZING is a management practice in which livestock are cycled through multiple fenced grazing areas (paddocks) to manage forage production, forage quality, and environmental quality.

"I was very blessed with parents that were willing to do things a little different."

—KURT DALE

After graduating with an ag economics degree from Kansas State, Kurt Dale worked as a grain merchandiser, but found it was not his calling. Ready for a change, he moved back to the family farm in southwest Kansas where he grew up. As a third-generation farmer, Kurt worked alongside his father on the family's winter-calving cow-calf operation, using the same management practices that had been in place for decades: one seasonal rotation from a winter paddock to a summer paddock.

Though Kurt's father was still handy, fixing equipment whenever it broke down, he was ready to slow down and enjoy his growing herd of grandchildren. Kurt, the youngest of six, was eager to take a larger role in managing the farm. He faced a tough choice: invest in new, larger equipment to improve labor efficiency or sell off equipment and make do without? Knowing new equipment would require more acres and hours on the tractor to justify the cost, Kurt began exploring other options.

Through newsletters, information from extension agents, county meetings, and a subscription to *Stockman Grass Farmer* magazine, Kurt became interested in rotational grazing. When he realized his father was open to this change, Kurt started gathering all the information he could find on how to make rotational grazing work on their farm.

Foray into Rotational Grazing

To make the shift to rotational grazing, major infrastructure changes were needed. Kurt applied for cost share with NRCS in 1997 to help offset the cost of running



Kurt Dale holding a largemouth bass from the pond on his farm.

American Farmland Trust

"Most days through the fall and the winter, we are somewhere between 75,000 to 100,000 pounds per acre. I think something over 50,000 is where the magic happens."

water lines and adding cross-fencing to ensure cattle had access to water in all the smaller paddocks on his native range. He started by creating eight paddocks and has since increased to 20 paddocks that can be further sub-divided using polywire temporary electric fencing. He added several watering points with solar pumps to ensure water is accessible in each paddock.

Over time, Kurt has refined his grazing system, learning what works best on his operation while adapting to the unique challenges each year brings. He aims to rotate cattle every three to five days in the summer and every day or two in the fall and winter when grazing stockpiles.

Adjustment Period

The first couple of years were not a glowing success, in Kurt's mind. But as he spent more time handling the cattle, helped them adjust to electric fencing, refined his stockmanship skills, and culled for calmer dispositions and smaller frames, Kurt saw major changes. He has found that 1,000- to 1,200-pound cows work better than bigger framed animals when it comes to year-round grazing.

One notable improvement was reduced shrink at the time of sale. Because the cattle were calmer during handling and transport, they experienced less stress and maintained higher weights.

"We're planning the rest periods as much as planning the grazing."

As for the pastures, which previously had areas of under- and over-grazing, the changes were slow but rewarding. With longer rest periods between grazing, and a higher stocking density preventing picky eating, the pasture grasses have become lusher and more diverse. Manure gets spread evenly across the paddocks now, and grasses get trampled to allow smaller species to get light and cool season grasses to start growing earlier in the season.

Not only has this increased the quality and quantity of feed for his cattle, it has also improved quail habitat. Where Kurt once found quail in only one section of pasture, he now finds them all over his land.

Grazing Crop Ground

To further reduce supplemental feeding and increase grazing acreage, Kurt now grazes various grain crops in addition to a forage mix planted specifically to graze. He's found that a 15-20 species mix with 75% warm season grasses plus broadleaves and brassicas perform the best. Millet is one of his favorite components of the mix, as it does well in the summer and, unlike sorghum, doesn't produce prussic acid, which is toxic to cattle. However, sorghum does better in the winter, so Kurt uses it heavily in mixes to stockpile.

One benefit of Kurt's forage mix is that it has a wide planting window, anywhere from mid-May through July, giving him flexibility. Additionally, the mix is key to good breed-back through excellent body condition. Kurt puts his cows on the forage mix for 30 to 45 days in September when they start calving.

"Those mixed species under the irrigation system, that's the backbone of our grass-finished beef operation."

To allow for simultaneous grazing and irrigation, Kurt fashioned t-post crossings so his irrigation system can move through the polywire fencing (see photo below). Kurt has tried multiple systems to avoid the dreaded tangling and dragging of polywire by pivot wheels and has so far landed on this system.

To compliment his other practices, Kurt shifted from winter to spring calving, and then ultimately to fall calving. Now, when the calves are weaned in mid-April, they can immediately graze rye, wheat, or triticale. While his weaning weights decreased with the shift to smaller framed animals



This t-post crossing allows Kurt's irrigation system to move through his hot wire fencing on his pivots, allowing him to graze and irrigate his crop ground simultaneously.



Forage mix on crop ground before grazing (left) and after grazing (right).

that are more adapted to grazing, the animals make up for that difference quickly. By 9 months old, they're up to 500 pounds, and did all the work themselves by grazing.

Kurt has shifted to primarily no-till on his crop ground, only using tillage when necessary. He has found high stocking density can knock things down instead of tillage. He feeds his winter stockpile to cattle on crop ground so he can stay off native range until mid-April, giving it as much time to grow as possible. With this no-till shift, Kurt sold his tractors and most of his equipment. He has found he can more economically hire a neighbor to help with seeding, swathing, or other custom work instead of maintaining a large fleet himself, though he'll always hang onto his hand skid-steer.

After a particularly dry year required him to sell off some cattle, Kurt has honed his drought plan, and follows it carefully. He reduced his base herd from 125-head to 100-head and pays close attention to critical moisture dates; this leaves him feeling confident he can support his base herd even in dry years, especially with the added acres of crop ground he can graze. Almost every year he takes on custom cattle to graze, but if moisture is very low in the spring, he can choose not to.

"Utilizing the crop ground helps me maintain our cow herd at a set number where I hopefully wouldn't have to sell off a bunch if we had a super dry year."

ESTIMATED ECONOMIC OUTCOMES OF ROTATIONAL GRAZING

While no two years are the same for Kurt's dynamic operation, partial budgeting analysis was used to estimate the marginal benefits and costs of adopting rotational grazing on Dale Family Farms. The study was limited to only those income and cost variables affected by the adoption of rotational grazing. The table on page 4 presents a summary of these economic effects revealing that, due to the adoption of rotational grazing, Kurt's net income increased by $14,492/yr.

Increases in Income

Shifting to rotational grazing has caused a noticeable improvement in the condition of Kurt's calves at sale, and his prices reflect that. He now gets top prices within the weight range, a $1.61 increase per 100 weight, for an estimated benefit of $434/yr for steer calves and $241/yr for heifer calves.

When culling his herd each year, Kurt has shifted to finishing out those animals on grass and selling them directly to consumers. He sometimes buys a few open heifers from local ranches if more are needed to fulfill that market. This direct marketing of grass-finished beef has led to an estimated net income increase of $2,500 per animal for about six animals, for a total of $15,000/yr.

Most years, when moisture conditions allow for it, Kurt brings on an average of 175 head yearling feeders for custom grazing. These animals graze Kurt's crop ground in April and May, then get moved to native ground for the summer. This has doubled the number of animals on the native range during the growing season, made possible by frequent moves and long rest periods associated with rotational grazing. Kurt estimates his net custom grazing revenue is $25,000/yr.

"We've had a number of customers over the years tell us our beef has a richer taste. I think it comes from a highly mineralized soil, when the cattle are grazing annuals."

Decreases in Cost

There have been sizable cost-savings associated with Kurt's shift to rotational grazing.

Kurt's calves gain weight quickly, allowing him to sell the calves 30 days younger than he previously did, which saves an estimated $650/yr on feed.

To reduce unnecessary costs, Kurt sold his bulls and began leasing them instead. Because of his off-season fall-calving, and the regal treatment these rented bulls get on lush pasture, Kurt gets a good deal from the outfit he's worked with for years. He saves about $600/yr with this shift to renting bulls.

Rotational grazing has noticeably improved animal health and well-being. Kurt focuses on preventative measures, including a nutritious, grazing diet, which saves him $500/yr on vet bills.

Kurt's goal is to have under 60 days of supplemental feeding each year, compared to his previous seven months per year. This shift has saved $2,700/yr in feed costs. When considering labor, the savings increase. He used to spend two hours per day from October to April hauling feed, whereas now he averages only 30 minutes per day due to the reduction in feed. The labor savings comes out to $5,749/yr.

While installing solar panels for his additional watering points was expensive (see Increase in Cost section), the upgrade from his old windmills has saved him $1,000/yr in maintenance costs.

Decreases in Income

With Kurt's shift to grazing forage mixes and various grain crops, he reduced the amount of alfalfa he grows by 400 acres. While this shift has reduced his income by an estimated $14,200, it allows him to grow his forage blend that is foundational for his grass-finished beef.

Increases in Cost

The biggest increases in cost come from the added fencing and watering that rotational grazing requires.

Adding one large and six small water tanks cost about $4,974. A new solar pump was about $2,000, in addition to $6,000 for two replacement pumps for the old windmills. Installing ¾ mile of water line add $5,000 to the costs.

The existing 5-wire permanent fence on the exterior of his native range did not require any modification when Kurt adopted rotational grazing. His paddocks are established using polywire, fence chargers, insulators, and steel posts. To get his temporary fencing up and running, Kurt estimates he spent $3,000 over three years. Repairs and maintenance for the fence and chargers adds about $767/yr.

Rotational grazing requires frequent labor to move cattle from paddock to paddock. Kurt estimates he spends 80 hours per year across his crop ground and native range moving cattle on his 4-wheeler, a labor cost of $1,440/yr.

CLOSING THOUGHTS

While economics played a role in Kurt's decision to move to a rotational grazing system, it wasn't the only factor. Kurt has found that, when managed properly, the natural ecosystem can coexist with and strengthen his operation. After fencing cattle out of his pond, he was overjoyed to see how the turtles, fish, birds, and vegetation responded. He loves going down to the pond to clear his mind, and when family visits, he brings them down there to enjoy the beauty. Seeing quail flourish across his land, and his cattle happily moving to new lush grass every few days, is a constant reminder to Kurt that he's made the right shift for his operation.

> "Psychological income is very real and it's very significant."

ECONOMIC EFFECTS OF ROTATIONAL GRAZING FOR DALE FAMILY FARMS

Increases in Net Income

Increase in Income

ITEM	COST PER ANIMAL	ANIMAL NUMBER	TOTAL
Grass-finished feeder steer price premium	$9.64	45	$434
Grass-finished feeder heifer price premium	$8.03	30	$241
Price premium for culls (direct market)	$2,500	6	$15,000
Custom Grazing Revenue			$25,000
Total Increased Income			**$40,675**

Decrease in Cost

ITEM	COST PER ANIMAL	ANIMAL NUMBER	TOTAL
Finishing calves 30 days sooner	$8.67	75	$650
Leasing instead of owning bulls	$6	100	$600
Annual Vet cost	$5	100	$500
Decrease in supplement feed	$27	100	$2,700
Decrease feeding labor			$5,749
Annual windmill maintenance			$1,000
Total Decreased Cost			**$11,199**
Annual Total Increased Net Income			**$51,874**

Decreases in Net Income

Decrease in Income

ITEM	COST PER ACRE	ACRES	TOTAL
Alfalfa Revenue	$36	400	$14,200
Total Decreased Income			**$14,200**

Increase in Cost

ITEM	COST PER UNIT	UNITS	TOTAL
Large water tank	$2,080	1	$2,080
Small water tanks	$482	6	$2,894
Solar pump	$2,000	1	$2,000
Windmill replacement pumps	$3,000	2	$6,000
Water line installation (¾ mile)			$5,000
Fencing startup cost			$3,000
Annual fencing repairs and maintenance			$767
Annual cattle moving labor (80 hours)			$1,440
Total Increased Cost			**$23,181**
Annual Total Decreased Net Income			**$37,381**

Annual Change in Total Net Income = $14,492

- This table represents estimated average costs and benefits attributed to adopting rotational grazing, as reported by the farmer. All values are in 2026 dollars.
- Grass-finished premiums were determined using a three year (2024-2026) summer (May-Sep) price average, and increasing one standard deviation to reflect the increase observed by Kurt. Prices were collected from USDA AMS Livestock, Poultry & Grain Market News; Kansas Weekly Cattle Auction Summary.
- Alfalfa budgets, bull costs, and grazing costs per animal were collected from Kansas State AgManager.info. September 2026.
- Water costs were collected from tankandbarrel.com. August 2026.
- This material was supported by USDA NRCS Cooperative Agreement #NR246215XXXXC011.

For more information about this study or to discuss grazing practices, contact:
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