Intentional Success

After helping several hundreds of cattlemen with Noble Research Institute and managing an operation himself, Hugh Aljoe says intention is the key to success.

Tips offered to manage pastures intentionally and prepare for drought.

by Kasey Brown, associate editor

Why are some farmers and ranchers more successful than others? A seemingly simple question has a convoluted answer. So many outside factors affect agriculture, and farmers and ranchers certainly understand that. However, there is a trend among successful operators.

Hugh Aljoe, a pasture and ranch consultant and director of producer relations with Noble Research Institute, has worked with several hundreds of producers in the southern Great Plains as a consultant after being a ranch manager himself for many years. Often, he says, people get caught up on the processes instead of the outcomes. What do you want to achieve with your operation? Then ask yourself, how are you going to get there?

"Some producers are more successful than others. As we work with these producers, one of the most important aspects that I see is they are more intentional in their management than those who have less success," Aljoe says. "The intentional producer experiences fewer surprises. They are able to hit targets more frequently. They never lose sight of what's important. If there is a surprise, they handle it easier."

The issue he's found is that many producers have a thought process, not an actual plan. It's in their heads, not written down. There's no record of past activity, so they can't make intentional, informed decisions.

Pastures

"If we graze our pastures, but we don't manage our pastures for grazing, we might not be intentional," he says.

Pitfalls of poor grazing management, he says, include having a use-it-or-lose-it approach to grazing, not soil-testing, no prescribed fertilizer use, no prescribed weed or brush management, and no monitoring of canopy cover or residuals.

If you have introduced pasture (i.e., Bermuda grass, fescue, etc.), he recommends soil-testing on a regular basis. This allows you to apply the right rate of the right product at the right time to increase soil fertility and forage production, he urges. Use a prescribed weed and brush control that fits your objective to give grass a better chance. The grass needs adequate recovery times, too.

"We want to be able to manage the grazing, end-of-season residuals and the ground cover. We've always heard 'take half, leave half,' but we always want to take the total of that half that's

Continued on page 20

growing above ground," he says. "Sometimes we're eager to get that half that's growing below the ground."

Aboveground biomass is incredibly important, and Aljoe is paying more attention to percent of organic matter in the soil. Organic matter either comes through the roots or from materials grown above, he says, adding that if you're building organic matter, it needs to come from both sources. It takes grass to grow grass and organic matter. Ground cover is essential.

"For every inch of rainfall that occurs, it takes somewhere between 1% to about 1.3% of soil organic matter to hold that water within the soil," Aljoe says. "So, if you can improve your soil organic matter by 1%, you can hold an additional 7/10 to 1 inch of rainfall in the soil and it doesn't run off. How much is that worth to you?"

Table 1: Intuitive ranch assessment

	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
Stocking rate (mature cows)	74	71	73	71	72
36.8 (LT avg.): annual rainfall	34.8	40.5	37.9	34.2	33.1
Percent deviation from average	-5%	10%	3%	-7%	-10%
Pasture condition ratings					
Overall	Fair	Fair	Fair	Good	Good
Grass cover	Fair	Fair	Good	Excellent	Excellent
Litter cover	Poor	Fair	Poor	Fair	Fair
Bare ground	Abundant	Some	Infrequent	None	None
End-of-season residual	None	Limited	Limited	Adequate	Limited
Cow body condition score					
At calving	5.25	5.5	5.75	6.25	6
At weaning	4.5	5	5.5	5.75	5.5
Hay feeding, months					
Planned	3	2	2	1	2
Actual	4	3	1.5	1	1
Native grass residual, months					
Planned	0	0	1	1	1
Actual	-1.5	-0.5	0.5	1	0

When using spreadsheet, enter long-term average rainfall in gray box. Then, continuing in that row, enter annual rainfall for each year. CAUTION: Do not enter information in the row below as the percent deviation from average is calculated automatically by formula.

Stocking rate

The issue with unintentional stocking rates is that producers set a number but don't manage that number. They set the number based on history and experience, instead of a science-based approach.

They may measure rain, but they don't use it to set their stocking rate. Grass *is* a renewable resource, but only if there's rain and active management.

However, an intentional cattleman sets and adapts their stocking rate according to rainfall and inputs. Aljoe outlines a tool he's developed that could be replicated — an intuitive ranch assessment (see Table 1). It includes key categories, like rainfall, pasture status, body conditions and feeding rituals, and then rates them whether they have improved highly or moderately, or declined highly or moderately. There is no middle-option default, so you have to decide whether you're improving or not.

This helps adjust your stocking rate objectively. Aljoe shares that often cattlemen end up feeding hay for much longer than they anticipated, and that means they are overstocked.

"For every month you're forcing cattle to 'hustle' or are feeding hay over what is planned for during the winter, you're at least 8.3% overstocked, because 1/12 is 8.3%," he says.

There is a way to predict a drought and the appropriate stocking rate with a regional water year table (see Table 2, page 22). His begins in October because that's when the recharge begins within his soil profile in Oklahoma.

"Spring begins in about April for most of us. We take our long-term average and monthly average; add those up. Then we put [it] into a cumulative total, and then put it on a percent basis. Do the same as we go through the year and track along together. We can determine if there's a variance between the two.

"If it's positive, we have more grass, typically, than we should. If it's negative, we're running behind," he continues. "If you look at the percentage difference between Q1/Q2 and the long-term average, it's the actual-to-date vs. the long-term expectation at the same date.

"So, we've got all this information right here. The producers that I worked with that were using this during the drought of 2011, they saw it coming," Aljoe recalls. "They destocked in early May. April shows -19%, so they destocked by 20%. They made it through the rest of the summer just fine under drought conditions because they had the early-warning system right there."

For more information on consulting services by Noble Research Institute, visit *www.noble.org/ag/*.

Aljoe offers tips in four more areas of an intentional operation — cattle management, marketing, recordkeeping and employees. To read the rest of his advice, check out the digital April *Angus Beef Bulletin EXTRA* at *www.angusbeefbulletin.com/extra*. Until the September print version of the *Angus Beef Bulletin*, stay informed of industry news, management, health & nutrition, and marketing information relevant to commercial cattlemen. You can subscribe for free monthly inbox delivery of the *Angus Beef Bulletin EXTRA* at *www.angusbeefbulletin.com/extra*.

Continued on page 22

Table 2: Water year rainfall table

	Local long-term monthly rainfall			2017-2018 water year monthly rainfall				
Month	Monthly avg., in.	Cumulative total, in.	% long-term year avg.	Monthly total, in.	Cumulative total, in.	% long-term year avg.	Variance from LT avg.	% difference of cumulative LT avg.
October	4.23	4.23	11.61	1.02	1.02	2.80	-8.81	0.24
November	2.20	6.43	17.66	0.06	1.08	2.97	-14.69	0.17
December	2.37	8.80	24.16	1.81	2.89	7.94	-16.23	0.33
January	1.54	10.34	28.39	0.15	3.04	8.35	-20.04	0.29
February	1.94	12.28	33.72	7.16	10.20	28.01	-5.71	0.83
March	2.66	14.94	41.02	3.45	13.65	37.48	-3.54	0.91
April	3.13	18.07	49.62	2.01	15.66	43.00	-6.62	0.87
May	5.62	23.69	65.05	6.04	21.70	59.58	-5.46	0.92
June	4.13	27.82	76.39	2.68	24.38	66.94	-9.45	0.88
July	2.96	30.78	84.51	2.03	26.41	72.52	-12.00	0.86
August	2.52	33.30	91.43	5.47	31.88	87.53	-3.90	0.96
September	3.12	36.42	100.00	9.11	40.99	112.55	12.55	1.13
TOTAL	36.42			40.99				

When using spreadsheet, only input data into the white cells. The yellow and green cells contain formulas, and numbers are automatically generated. Locate and enter your local long-term monthly rainfall averages in the second column. Track and enter your local (ranch) rainfall by month for the current water year and enter in "Monthly total" column. At the end of the water year, copy the spreadsheet to a new sheet identified by year, clear contents of white columns and begin again.