

MiG Dollars & Sense: What pays and what doesn't



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What pays

- Extending the grazing season



Winter feed costs are the largest cost for most cow-calf producers



Most farmers and ranchers have no idea what it cost to get to this point !

Characteristics of Profitable Herds

2000-2004 Illinois SPA database, 158 Herds

	Top 15%	Average	Bottom 15%
Net Profit	\$21,701	\$-4,373	\$-34,007
Herd Size	202	119	185
% Return on Investment	22.2%	3.7%	-16.7%
Pounds of Calf sold/cow	506	454	427
Feeder Calf Price	\$103.14	\$97.39	\$99.69

Source: Dr. Allen Williams, U of IL, Beef Extension Specialist, 2008

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Total Annual Cow Cost	\$267.35	\$332.33	\$480.37
Annual Feed Cost	\$168.51	\$212.76	\$280.43

Source: Dr. Allen Williams, U of IL, Beef Extension Specialist, 2008

Summary of SPA record herds

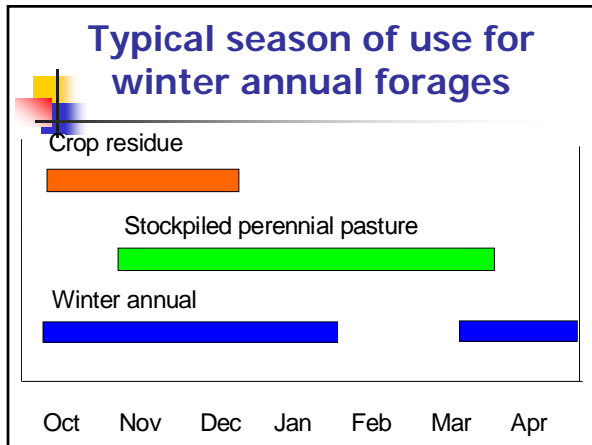
Dependent Variable	R ²	
Feed Cost	.567	-There are 8 financial measures capable of explaining over 82% of farm-to-farm variation in RLM
Depreciation Cost	.086	
Operating Cost	.049	-Cost factors were far more influential in driving RLM than production, reproduction, or producer controlled marketing factors
Calf weight	.046	
Capital charge	.024	
Calf price	.027	
Weaning percentage	.017	-In the financial prediction equation nearly 57% of herd-to-herd variation in profit can be explained by feed cost
Herd size	.007	
Total	.823	

Source: Dr. Allen Williams, U of IL, Beef Extension Specialist, 2008



Winter Grazing Options

- ❖ Crop residues
- ❖ Stockpiled perennial pasture
- ❖ Winter annual forages



Daily and seasonal forage costs for alternative wintering strategies at typical yields, costs, and period of use based on 100 fall-calving cows.

Winter feeding period from Nov 20 to March 31

Forage source	Hay	Cornstalks	Stockpiled tall fescue	Ryegrass + cereal rye
\$/cow/day	\$1.52	\$0.15	\$0.44	\$0.73
Days of use	130 hay	60 stalks 70 hay	110 graze 20 hay	90 graze 40 hay
Wintering cost	\$198	\$114	\$79	\$126

Fall calving cow-calf performance

Nov 13–March 19	Cow ADG	Calf ADG	% preg
Stockpile tall fescue + legumes	.44	2.24	92 %
Marshall ARG + cereal rye	1.61	2.45	94 %
Hay + creep feed	-0.86	2.02	86 %





What pays

- Strip grazing to increase utilization rate on dormant pasture

Management needed to achieve target utilization rate

Utilization rate	Stockpiled pasture	Winter annual	Hay feeding
80 %	1-day strip graze		Ring feed 2-day
70 %	3-day strip graze		Ring feed 3-day Unroll daily
60 %	7-day strip graze		Ring feed 5-day
50 %	14-day strip graze		Unroll 2-day
40 %	Set stock		Cows are in the hay yard!

Effect of utilization rate on daily forage cost for stockpiled pasture, winter annual forage, and hay feeding for fall-calving cows

Utilization rate	Stockpiled pasture	Winter annual	Hay feeding
80 %	\$0.44	\$0.73	\$1.52
70 %	\$0.48	\$0.81	\$1.70
60 %	\$0.53	\$0.91	\$2.01
50 %	\$0.60	\$1.06	\$2.48
40 %	\$0.67	\$1.25	\$3.18

What pays

- Strip grazing to increase utilization rate on dormant pasture

This is one of the best paying jobs on the farm !!

What pays

- Interseeding legumes



What pays

- Legume interseeding
 - Increase pasture yield and quality
 - Reduce N fertilizer use
 - 30 - 100 lb increase in weaning weights
 - 1/4 to 1/2 lb increase in ADG
 - Works best with rotational grazing and medium fertility
 - Beneficial for all classes of livestock


What pays

- Soil testing



What pays

- Soil testing
 - Have a plan & stick to it
 - 1/3 or 1/4 of the farm each year
 - Use the results to plan nutrient management



What pays

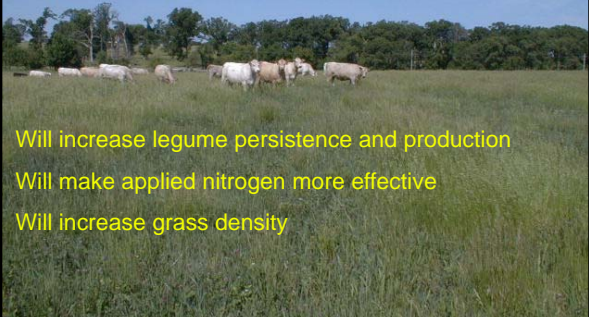
- Soil testing specifics
 - Plan 20-40 acres per sample
 - Take at least 20 cores for each sample
 - Avoid "hotspots"
 - Mix thoroughly



What pays

- Liming and other basic fertility on low testing soils

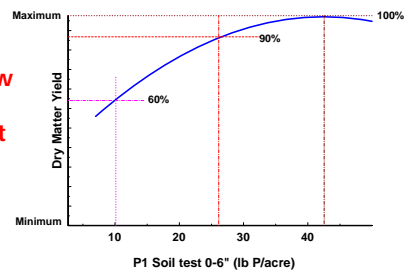
Increasing soil test levels from low to medium:



Will increase legume persistence and production
 Will make applied nitrogen more effective
 Will increase grass density

Should I Fertilize?

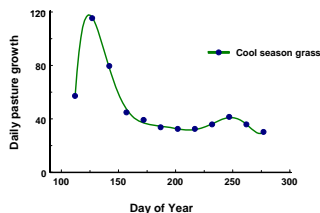
- Soil test levels



Going from low to medium fertility almost always pays

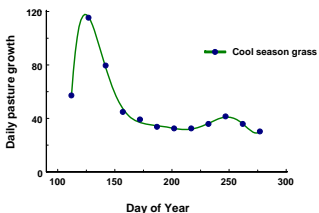
What doesn't pay

- N fertilization when you already have too much grass



What doesn't pay

- N fertilization when you already have too much grass



Why aggravate the problem ?

What doesn't pay (most of the time)

- Micronutrient fertilization
 - Only worry about micronutrients after you have dealt with macronutrient problems or...
 - If there is a known history of micronutrient deficiency in your area

Perennial ryegrass evaluation


- Compare production, quality, and persistence
 - BG34 PRG
 - Mara PRG
 - Stargrazer tall fescue (endophyte free)

Perennial ryegrass evaluation

- Compare production, quality, and persistence
- High and low fertility management
 - Both treatments receive 240 lb N/A
 - Low fertility 40 lb P & 80 lb K
 - High fertility 115 lb P, 93 lb K, 250 lb S, 1 lb Cu, 2 lb B, & 5.4 lb Zn

Perennial ryegrass evaluation

- Compare production, quality, and persistence
- High and low fertility management
- Grazed when pasture reached 6-8"

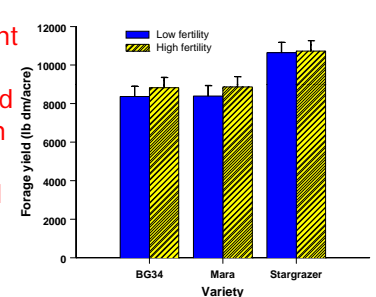


Perennial ryegrass evaluation

- Compare production, quality, and persistence
- High and low fertility management
- Grazed when pasture reached 6-8"
- Grazed to 2-3", usually in 4 to 6 hours

3-Year forage yield summary

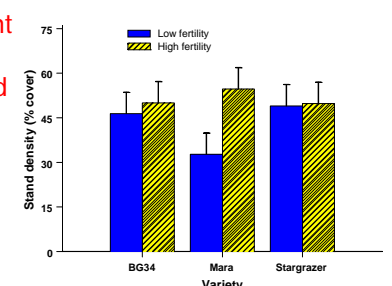
Micronutrient fertility package had no effect on annual forage yield



Variety	Low fertility	High fertility
BG34	~8500	~9000
Mara	~8500	~9000
Stargrazer	~10500	~10500

3-Year stand density summary

Micronutrient fertility package had no effect on stand density of seeded species



Variety	Low fertility	High fertility
BG34	~45	~50
Mara	~35	~55
Stargrazer	~45	~45

What doesn't pay

- Micronutrient fertilization
 - Both treatments receive 240 lb N/A
 - Low fertility 40 lb P & 80 lb K
 - High fertility 115 lb P, 93 lb K, 250 lb S, 1 lb Cu, 2 lb B, & 5.4 lb Zn

The micronutrient package cost additional \$78/acre with no measurable benefit!

What doesn't pay

- Owning equipment




What doesn't pay

- Owning equipment
 - It begins losing value the moment you buy it
 - It requires fuel, labor, & maintenance
 - You can almost always hire a job done or rent equipment cheaper than you can own it
 - It makes livestock lazy

What doesn't pay

- Owning equipment



Ten foot drill costs \$15,000....

.... at \$8/acre rental rate, you need to plant almost 2000 acres

What doesn't pay

- Making hay anytime yield is less than two tons/acre

What doesn't pay


- Making hay anytime yield is less than two tons/acre
 - Land cost/ton may be same or higher on low producing fields
 - Equipment cost/ton higher on low producing fields
 - Labor cost/ton higher on low producing fields

What doesn't pay

- Making hay anytime yield is less than two tons/acre
 - *MU economist Dr. Kevin Moore reports that every \$5,000 invested in hay equipment requires 60 cows to breakeven on ownership cost.*

What doesn't pay

- Building fence with the cheapest material you can buy




What doesn't pay

- Building fence with the cheapest material you can buy


It might go up cheaply....

.... But maintenance and replacement will eat you up



What does pay

- Shopping around and building fence with good quality material



What doesn't pay

- Fancy livestock

(I never had any, so I don't have any pictures)



What doesn't pay

- Fancy livestock

It's impossible to make a #1 steer into something better



What doesn't pay

- Fancy livestock

It's impossible to make a #1 steer into something better


It's much easier to make a # 2 into a # 1



What does pay

- Functional livestock on superior pasture

You can make more money with average genetics and superior grass management than the other way around






What doesn't pay

- Miracle or wonder grasses

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 - Is there a reason bermudagrass won't grow in South Dakota?

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 - Is there a reason a New Zealand ryegrass might not survive in South Dakota?

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- Miracle or wonder grasses
 - Is there a reason a New Zealand ryegrass might not survive in South Dakota ?

Location	Avg Jan. temp	Avg July temp	Record Jan.	Record July
Morris, MN	18	87	-32	104
Hamilton, NZ	65	48	94	14

Being a human cornerpost doesn't pay



Step out and do something !