South Florida Beef Forage Program - Winter Supplementation

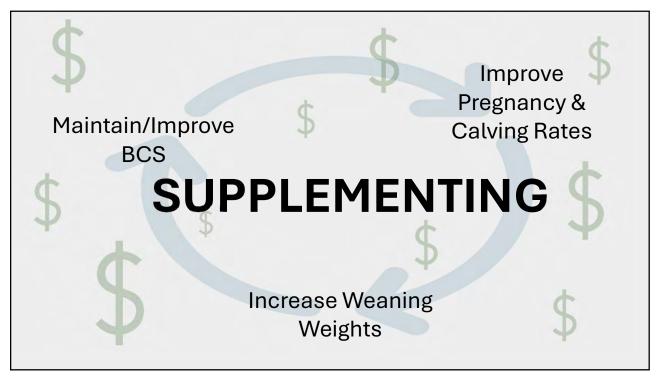
August 28th, 2025 – Labelle, FL

Economics of Implementing a Supplementation Program

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What to Consider Nutritive Value of Forage Nutritional Requirements of Cows How to Meet those Requirements Economically How Supplementing Now Affects Production Later

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What to Consider

- Sometimes, the underlying cost of "convenience" is more expensive than the upfront cost of "inconvenience."
- It is important to understand the cost of protein, not just the total cost of feed. Is one option actually cheaper than the other?
- It is VERY important to know what you are feeding, how much you are feeding, and why you are feeding it. What do your cows need?

Meeting those Requirements Economically

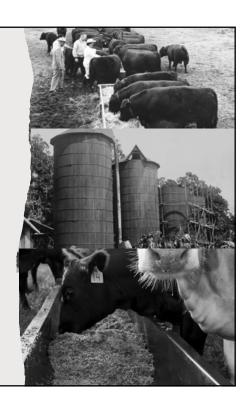
Protein Source	Total Cost of Feed	Pounds of Protein in the Feed	\$/lb of Protein
41% cottonseed meal	\$350/ton*	820 lbs	\$0.43
32% liquid feed	\$325/ton*	640 lbs	\$0.50
20% cubes	\$18 per 50 lb bag	10 lbs	\$1.80

ONE IS NOT SUPERIOR OVER THE OTHER; THIS IS JUST SHOWING HOW TO THINK ABOUT THE COST OF PROTEIN IN TERMS OF THE TOTAL COST

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Infrastructure Costs of Supplementation

- Supplementing itself is expensive...but just getting set up to supplement is also expensive.
- Lick Tank: \$250-\$650 (depends on size, wheels sold separately)
- 8 ft. Concrete Bunks: \$185 \$350 (consider delivery/custom fees)
- 10 ft. Poly/Steel Bunk Feeder: \$150-\$550 (depends on size/type)
- Feed Bin w/ Auger: \$2,500 \$10,000 (depends on tons & auger size)
- Feed Wagon: \$8,000 >\$50,000 (how fancy do you need it to be?)



^{*:} DOES NOT INCLUDE COST OF DELIVERY OR PURCHASE OF LICK TANK/BUNKS

Supplementation Infrastructure Costs

❖ 525 lb Weaned Calf = ~\$2,000

- 1, 4-wheel Lick Tank = 33% of a calf
 - ~100 head, ~25 head per wheel



- 25, 8 ft. Concrete Bunks= 4.33 calves
 - ~100 head, 2 ft. per head
- 20, 10 ft. Poly/Steel Bunk Feeders = 5.5 calves
 - ~100 head, 2 ft. per head
- Feed Bin w/ Auger= 5 calves



• \$20,000 Feed Wagon = 10 calves

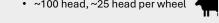




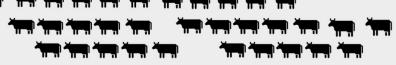
Why do this now?

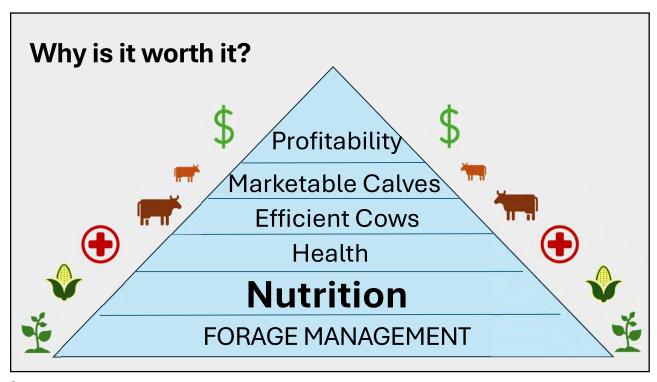
A lot more revenue to give up in years when profits won't be as favorable

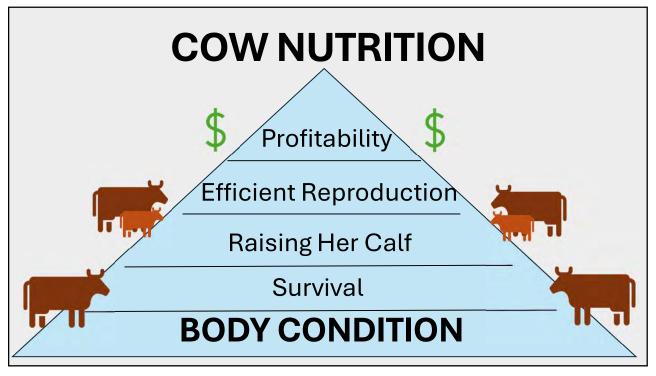
- Because calf prices will come back down eventually...
- While profits are higher, now is the time to explore investing in these changes with long-term outcomes.
- ❖ 525 lb Weaned Calf in a "bad market year" = ~\$900
- 1, 4-wheel Lick Tanks = 75% of a calf
 - ~100 head, ~25 head per wheel

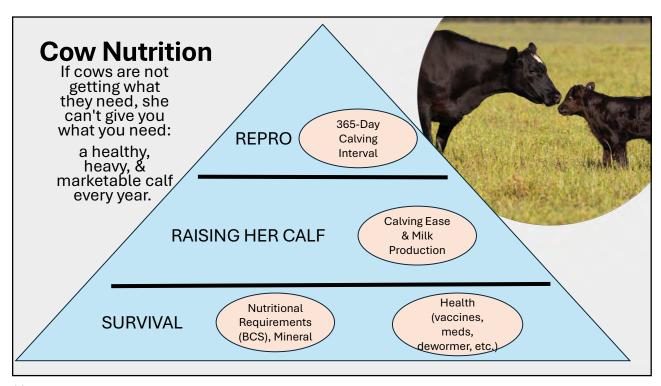


- 25, 8 ft. Concrete Bunks= 9.75 calves • ~100 head, 2 ft. per head
- 20, 10 ft. Poly/Steel Bunk Feeders = 12 calves • ~100 head, 2 ft. per head
- Feed Bin w/ Auger= 11 calves
- \$20,000 Feed Wagon = 22 calves









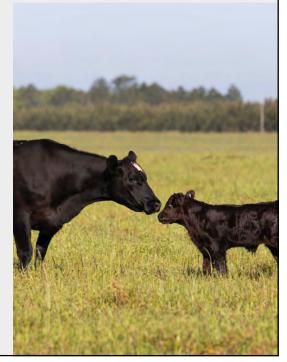


Supplementation Repro

"In terms of offspring preweaning growth, these studies observed that <u>pre-calving supplementation</u> of protein and energy increased calf body weight at weaning by, on average, 25 lb..." (Moriel & Vendramini, 2023)

"...a reduction in cow BCS from calving until the start of breeding season further reduced pregnancy percentage, calving percentage, and calving distribution during the first 30 days of calving in cows calving with when cow BCS < 5;..." (Moriel, 2024)

Proper nutrition, before, during, and after calving is important for your cows to be able to focus on growing a calf and getting bred, not trying to meet their nutritional requirements.



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How the Now Affects the Later: Calf Value

BCS & Pre-calving Nutrition Affect VALUE of Calves

	BCS≥5 at calving	BCS < 5 at calving	\$/Head Difference
Calf Weight at Weaning	525 lbs	500 lbs	25 lbs
Calf Sale Price	\$2,016	\$1,920	\$96

CALF PRICE: \$3.84 FOR 500-525 LB STEER CALVES

How the Now Affects the Later: Pregnancy & Calving Rates

Maintaining a BCS of 5 or greater before calving helps avoid having to play "catch up" after calving.

Body Condition of Cows At & After Calving Affects Pregnancy & Calving Rates

	AFTER CALVING						
AT CALVING	Lost BC		Maintain	ed BC	Gained BC		
BCS < 5	Pregnancy 75%	Calving 70%	Pregnancy 85%	Calving 81%	Pregnancy 84%	Calving 79%	
BCS≥5	Pregnancy 88%	Calving 85%	Pregnancy 90%	Calving 87%	Pregnancy 93%	Calving 87%	

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How the Now Affects the Later: Revenue Per Cow Body Condition of Cows Affects Revenue Example: herd of 100 cows Comparison: Maintain BCS ≥ 5 vs. Maintain BCS < 5							
	PR%	CR%	CD% (1 st 30 days*)	# of calves	WW (lbs)	Total Calf Revenue	Revenue Per Cow
BCS < 5	85%	81%	57%	81	500	\$155,520	\$1,555
BCS≥5	90%	87%	68%	87	525	\$175,392	\$1,753
*affects average weaning weights because more calves are born earlier in the season							

Put it all together...ways to look at "ROI" (w/ high calf prices)

- 1) Invest calf revenue to implement supplement plan -> gained calves as a result of the investment
 - Lick tank (\$650) + Supplement (\$350/ton x 36 tons) = \$13,250 (revenue from 6.6 calves)
 - → 100 cows, 4 lbs per head per day, 180 days (Sept.-Feb.)
 - Have 6 more calves to market the next year that weigh 525 lbs each at \$3.84/lb = \$12,096
 - Extra calves almost paid for the implementation (\$1,154 short)
- 2) Made almost \$20,000 more when supplementing compared to not supplementing (more calves=more money, regardless of mkt prices)
 - Spent \$132.50/cow for supplement → Made \$198/cow more when supplementing →
 \$65.50 return/cow more than not supplementing
- 3) Depreciate the lick tank (best way)
- \$650 \$250 / 10 years = \$40 depreciation cost per year
- \$40 per year + \$12,600 per year for supplement = \$12,640 total (\$126.40 per cow) per year
- Spent \$126.40/cow for supplement → Made \$198/cow more when supplementing →
 \$71.60 return/cow more than not supplementing

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Annual Costs of Investment-Looking Long-term

- Examples of depreciating over 10 years with 100 hd herd
 - Purchase price salvage value/years in production

Qty	Asset	Cost per Item	Salvage Value	Annual Cost	Cost per Cow
1	Lick Tank	\$650	\$250	\$40	\$0.40
25	8 ft. Concrete Bunk	\$350 each	\$150 each	\$500	\$5.00
20	Bunk Feeder	\$550 each	\$200 each	\$700	\$7.00
_	Feed Bin w/ Auger	\$10,000	\$3,500	\$650	\$6.50
_	Feed Wagon	\$20,000	\$8,000	\$1,200	\$12.00
TOTAL				\$3,090	\$30.90

"What about the bad years?"

- I am not saying a supplementation program will make you profitable **every year**....there are still going to be some bad years.
- **BUT...**I am saying that having an established program and the right infrastructure may help in mitigating some loss in the bad years.
- Example 1:
- →you aren't able to provide liquid feed after calving in a bad market year
- →you have to back down to just providing it before calving
- → you still have the link tank to be able to provide feed at all to try & increase weaning weights
- Example 2:
- →you can't afford to feed every day, but it is still cheaper or the same price to buy in bulk rather than "spot buying" feed
- →you still buy the same amount, but "stretch out" feeding period (feed 3 times a week instead of 5)
- ightarrow you still have the feed bin to store the same amount to supplement cow herd & maintain BCS

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Conclusion

- Having a supplementation proper is vital for production. Supplementing is expensive...but so is not having calves to market.
- Large expenses such as supplementation/infrastructure, can be looked at as investments rather than just a large expense.
- ❖ Investing in these changes now can free you up to save money later in the bad years.
- Giving our cows what they need when they need it, allows them to focus on raising a healthy calf rather than "survival".
- ❖ Help your cows, help you!!

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QUESTIONS?

MAY GOD BLESS YOUR STEWARDSHIP!

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