

Our Profit is hiding in plain sight

- The areas I want to cover
 - The dollar (*and genetic*) cost of purchasing a bull versus growing your own bull
 - The value of selecting high butterfat cows
 - The difference in keeping cost of a cow if the rumen is fully developed as a calf
 - The difference in carcass value if you measure, breed and select for high carcass cutout
 - Calving in sync with Nature



Do I See
What I am
Looking at

I want to
challenge
you ...

The Milch Cow

“(B)y following the directions of M. Guenon, as laid down in the treatise, anyone can tell with certainty whether a cow is a good milker, or whether a heifer will become one, so that there need be no doubt as to the profit of raising an animal, and no chance of being taken in the purchase of one.”

*National tribute of the French Government
Paris, September 17, 1848*

Start observing and thinking

- Whether or not I cover what is going on with your farm and animals...
- I want you to go home and take a fresh look
- Do you operate a certain way because “everyone else does”
- Are you chasing a gross dollar or a net profit
- We cannot build a sustainable farm with unsustainable effort.
- This talk is simply to encourage you to start using your God given Wisdom and talents!

Which bull

- Do you realize that BUTTER-FAT, MUSCLE MASS and GRASS UTILIZATION are the 3 missing elements in all cattle operations today! The feedlot does not want these traits; **You must have them to survive using all grass!!!!**
- Do you realize you can not separate butter-fat, intramuscular-fat and tenderness. Each comes in the same genetic package
- *“When the male is much larger than the female, the offspring is generally of an imperfect form, if female are proportionally larger than the male, the offspring is generally of an improved form.”* Manley Miles

What defines a Fertile Bull

- Average bull today only breeds/impregnates 25-30 cows & leaves 10-15% of those cows open first 45 days of breeding season
- Highly fertile bulls get 80% of cows pregnant first 21 days of breeding season
- Highly fertile bulls impregnate 50-60 cows in 45 days
- Grain-fed bulls have more abnormalities than Grass-fed bulls.

Average Breeding Ability

- Average bull today lasts 3 breeding seasons
- 25 calves a year for total of 75 calves
- 3 years his back feet & legs are problematic
- After 3 years: long toes, cracked & crooked toes, and limping

Purchased Bull Costs

- Purchase price \$4000
- 3 breeding seasons if you are lucky @ \$400/year
- 25 calves a year
- 75 calves total cost \$5200 = \$69.33 per calf
- No genetic concentration or improvement ... his daughters are no better than their mother

Homegrown Herd Sire

You would produce just as many pounds (beef or dairy) with a bull from your best cows!

His offspring will be adapted to your farm

The cost of a bull from your herd would be a year's maintenance of cow = \$400 and then to grow him for another year \$400-\$550

Much cheaper = you have produced him on your grass, no capital outlay, he is environmentally adapted

Economics of using a Bull from your Herd

1. Maintenance one cow year \$400.00
2. 1 year maintenance on bull \$400.00
3. Fertile Bull produces more calves/year
4. Bull produces 75 calves over 3 years
5. \$800 to get to breeding age plus \$1,200 maintenance for 3 years, 75 calves=\$26.66

Purchased Bull vs. Bull from Your Herd

- Purchased bull cost \$69.33 per/calf
- Home raised bull cost \$26.66 per/calf
- A savings of \$42.67 per/calf/year saving
- Imagine the genetic benefits of using a bull from the the highest butterfat cow on your farm, AI to a genetically pre-potent sire.

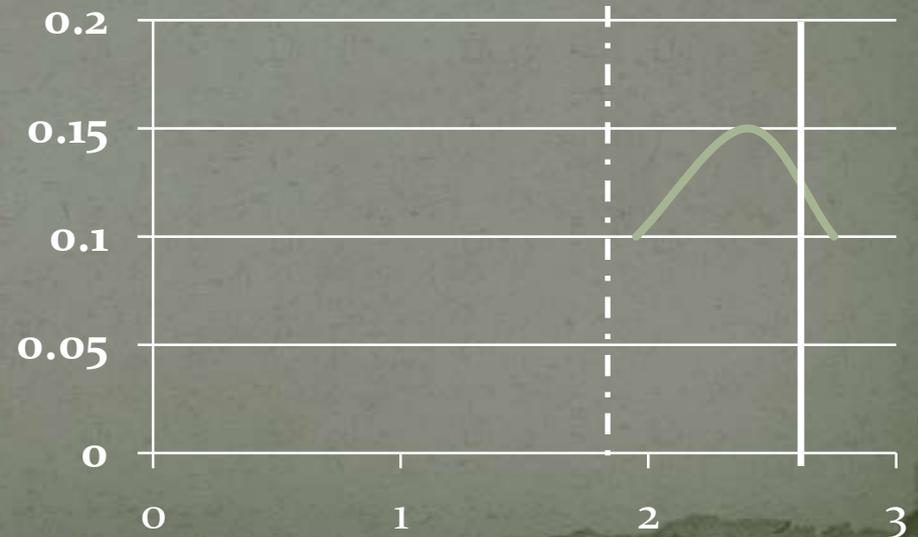
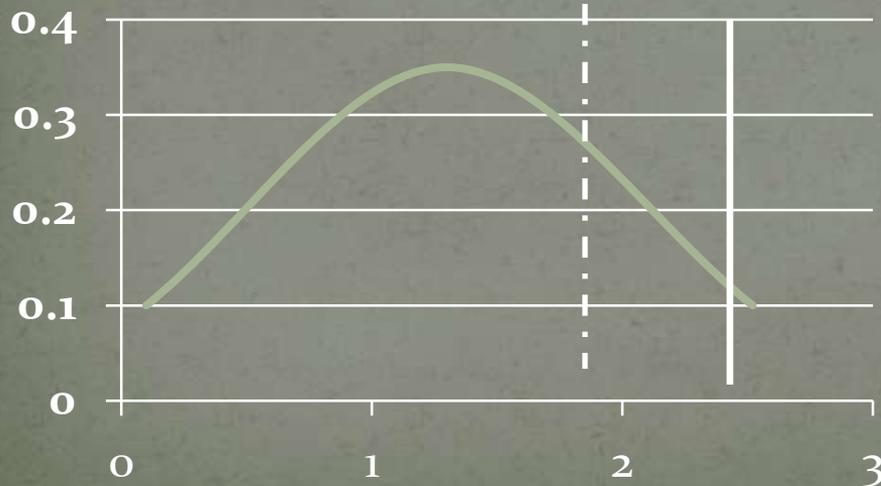
At 6 months this calf weighed 72% of mother, weaned at 9.5 months and 6 weeks later she had her next calf.



“A Tale of Ten Taurus”

The “Cookie Cutter Cattle Company”

- 5 bulls were from five ranches in the USA.
- 5 bulls were from one ranch in New Zealand
- The result of 30,000+ matings
- The result of 600 matings



Consistent off-spring

“Jeff” 6’ 2” black hair, black eyes and great athlete has six sons that are from 6’2” to 6’6” tall with black hair, black eyes and excel at sports.



Find a superior bull to start

- Nourish him well (epi-genetics)
- Choose superior females from your herd
- Choose males who equal or exceed dad to go back into the herd.
- Choose daughters who exceed mom and breed them back to their sire or brother or cousin.
- This “ties up” those positive genes in their offspring.
- Guard against any and all negative traits.

The importance of butterfat



Calf Butterfat Statistics

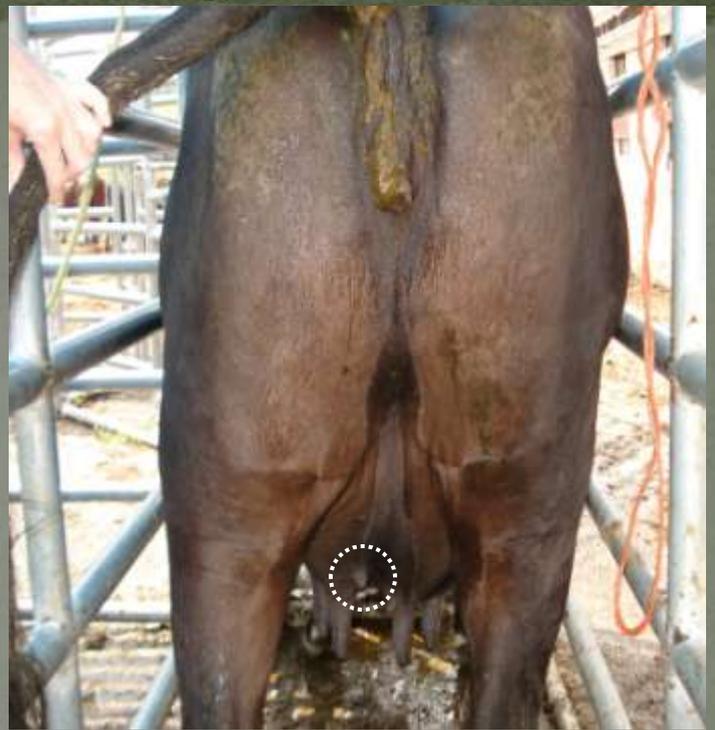
- How many pounds of butter-fat does it take to produce a 450-475# calf
- Average cow produces 160# fat a year
- Average calf you wean weighs 450-475#
- So $160 \times 16 = 2560$ oz divided by 300 days = 8.533 oz fat/day = 450-475# calf or 1.58# gain/day

Calf Butterfat Statistics

- 200# butter-fat X 16 oz = 3336 oz fat divided by 300 = 11.12 oz/ day or 550-600# calf or 2# gain a day
- 250# butter-fat X 16 oz = 4000 oz fat divided by 300 = 13.3 oz butterfat/day or 650-700# calf or 2.34# gain a day
- 300# butter-fat X 16 oz = 4800 oz fat divided by 300 = 16 oz butter-fat a day or 750-800# calf or 2.6# gain a day

Calf Butterfat Statistics

- 350# butter-fat X 16 oz = 5600 oz divided by 300 days = 18.66 oz fat/day or 800-850# or 2.8# gain/day
- 400# butter-fat X 16 oz = 6400 oz fat divided by 300 days = 21.3 oz fat/day or 900# calf or 3# gain a day
- 1/23/2013 Vale Oregon Sale Barn
 - 450 pound steer \$1.70/pound = \$765.00
 - 600 pound steer \$1.55/pound = \$930.00
 - 800 pound steer \$1.25/pound = \$1000.00
 - 900 pound steer \$1.20/pound = \$1080.00







Butterfat in our replacement animals

- How much more would fluid milk be worth If the butterfat was .5% to 1% higher?
- Customers want
 - Omega 3 fats
 - Clean/Organic milk and beef products
- Epiogenetics to maximize a dairy cow's genetic potential
 - Mineral Rich Grass
 - Apple Cider Vinegar

Nutritional Requirements for Development

1. Grow frame (bones)
2. Build muscle mass (carcass cut-out)
3. Build and place fat cells in muscle mass
4. Butterfat is a bypass protein (*does not have to be ruminated*)
5. Only cows that have the genetics for butter-fat develop calves with: growth, muscle mass, properly placed fat cells and give a good return on the grass you grow.
6. Abundant Nutrition = Genetic Expression

Developing that Rumen



“Let’s make a Rumen”

“Door number 4 please Bill”



Well developed
rumen

RUMEN #1105 INTERIOR EXCELLENT PAPILLI DEVELOPMENT AND HEALTHY DARK COLOR ASSOCIATED WITH PROPER FEEDING FROM BIRTH TO 12 WEEKS OF AGE. THE DARK COLOR IS FROM INCREASED BLOOD SUPPLY. THIS CALF WILL GROW TO BE PRODUCTIVE IN LATER LIFE.

Partial
And no
development



Minerals have a positive charge
And the rumen villi have a negative charge.



RUMEN #1105 INTERIOR EXCELLENT PAPILLI DEVELOPMENT AND HEALTHY DARK COLOR ASSOCIATED WITH PROPER

FEEDING FROM BIRTH TO 12 WEEKS OF AGE. THE DARK COLOR IS FROM INCREASED BLOOD SUPPLY. THIS CALF WILL GROW TO BE PRODUCTIVE IN LATER LIFE.

It is not It is not
what we eat, but
what we digest that
matters!



RUMEN #1105 INTERIOR EXCELLENT PAPILLI DEVELOPMENT AND HEALTHY DARK COLOR ASSOCIATED WITH PROPER FEEDING FROM BIRTH TO 12 WEEKS OF AGE. THE DARK COLOR IS FROM INCREASED BLOOD SUPPLY. THIS CALF WILL GROW TO BE PRODUCTIVE IN LATER LIFE.



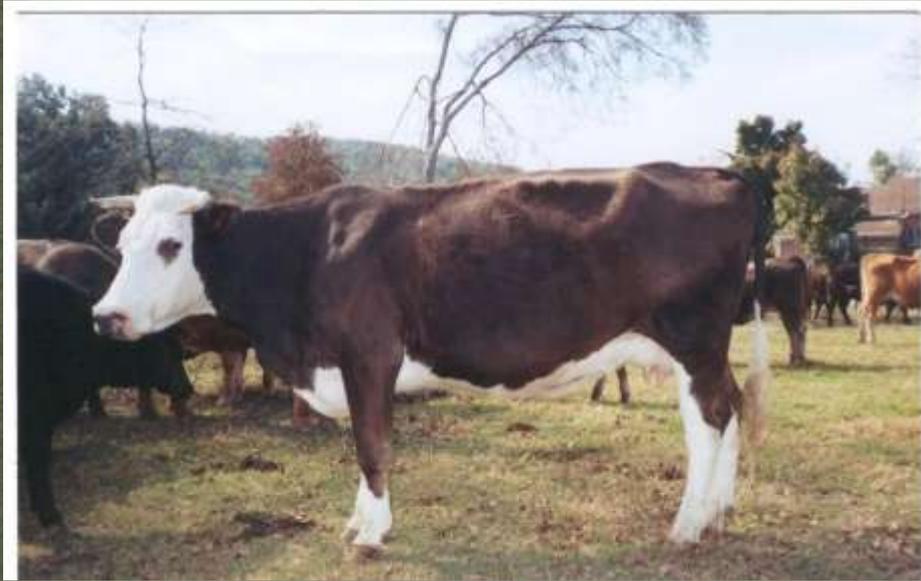
RUMEN FROM CALF #1106 INTERIOR SHOWS VIRTUALLY NO PAPILLI DEVELOPMENT. THE LIGHT COLOR SHOWS LACK OF VASCULARIZATION. THIS RUMEN WILL BE INEFFICIENT LATER IN LIFE.



It is not It is not what we eat, but what we digest!

“The average cow in America today digests 50% out of everything she eats.”

Anibal Pordomingo



Cows like this require diesel, tractors, hay choppers and feed bunks. She can't do the work for herself!

A calf left on it's mother 10-11 months with high mineral forages, high butterfat milk, transitioned to green grass...will digest approx 70% out of what she eats when mature.



She maintains her condition year round

What does that look like

50% utilization

- The average cow in New Meadows consumes 2.5 tons of hay per winter.
- She weighs 150-200 pounds less in the spring
- She can not support a calf at her side over winter
- 5-10% open cows to be culled every year
- Grass fats take approx 27 months to fatten

65-70% Utilization

- My cows consumed approx 2.10 tons per winter
- Weigh 100 pounds less in spring average
- Supports a calf at her side all winter
- Almost* every cow breeds back every year.
- Grass fats take approx 22 months to fatten

Developing Dairy heifers on Grass

- It costs \$780 to develop on grass to first lactation
- It costs \$1300 to develop on a TMR
- On the other end
 - Heifers developed on grass produced an average of 2000 more pounds of milk a year

They are producing that milk on a TMR

Weston A Price

If we are to provide nutrition that will include an adequate excess as a factor of safety for

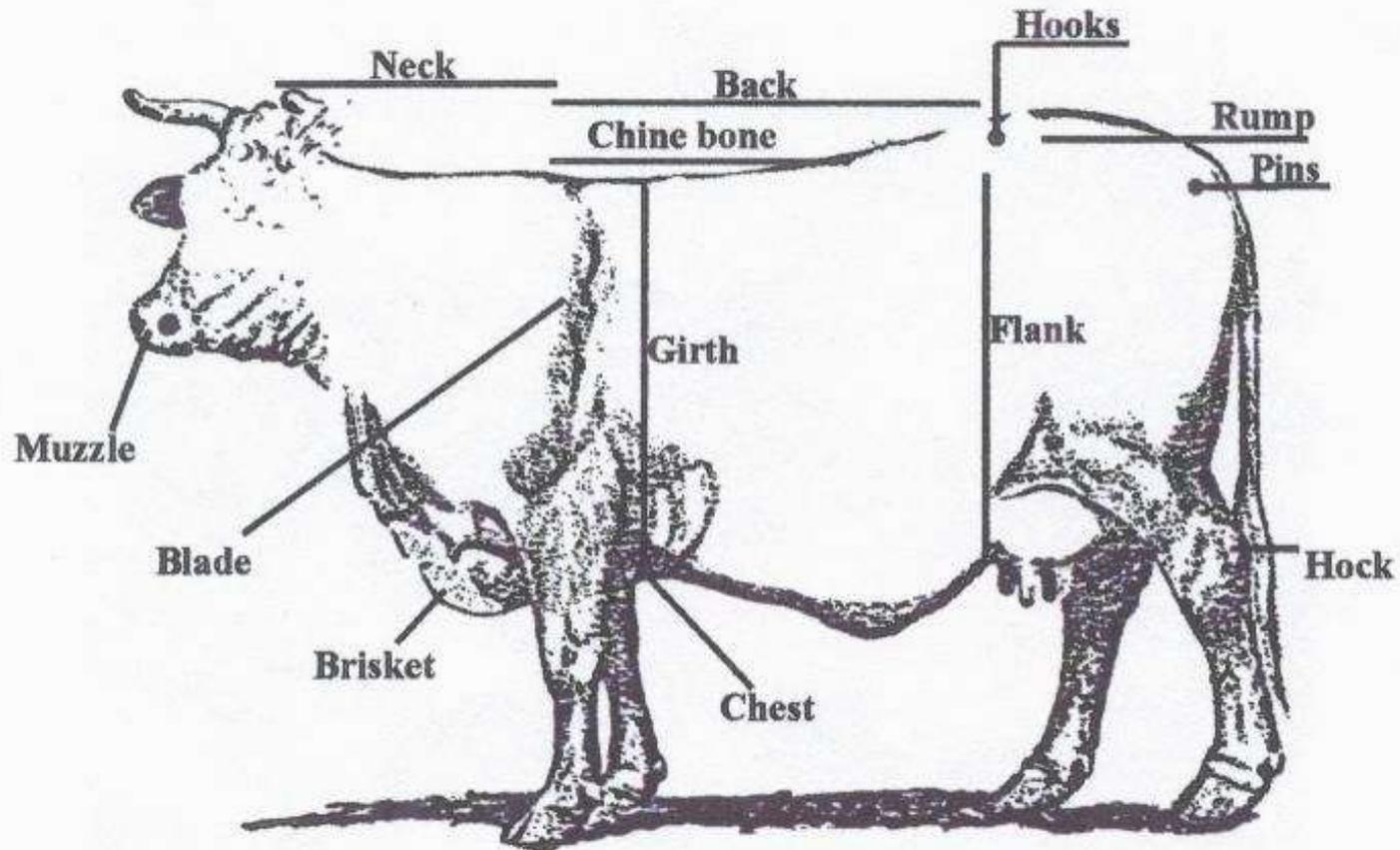
overloads, and for such periods as those of rapid growth , pregnancy, lactation and sickness, we must provide the access to the extent of about **twice** the requirements of normal adults. It will therefore, be necessary for an adequate nutrition to contain approximately **four times the minimum requirements** of the average adult if all stress periods are to be passed safely.

- Assume the average cow in your area costs \$400.00 to feed for a year (*use your own number*).
- At 50% efficiency, that means she only **digested** \$200.00 worth of what you fed her (50% of \$400.00).
 - 100% efficiency = \$200.00 of hay to feed
 - 90% efficiency = \$222.22 of hay to feed
 - 80% efficiency = \$250.00 of hay to feed
 - 70% efficiency = \$286.00 of hay to feed
 - 65% efficiency = \$308.00 of hay to feed
 - 60% efficiency = \$333.33 of hay to feed
 - 55% efficiency = \$363.00 of hay to feed
 - 50% efficiency = \$400.00 of hay to feed

Times ten years in your herd!!!!!!

Structural correctness

Figure 2



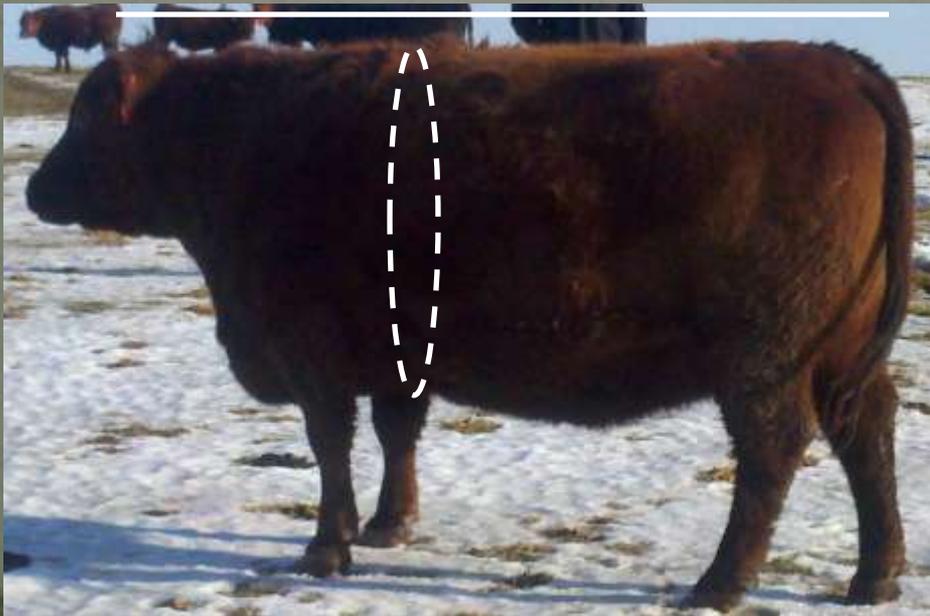
Linear Measurement

Near Perfect Form

Utilization of Grass

High Muscle Mass

High Reproductive Performance



Heart Girth vs. Top line

- For every 1" the top line is larger than heart girth...you loose 37 pounds of red meat
- For every inch the heart girth is larger than the top line...you gain 37 pounds of red meat
- Comparing two fat steers, one a minus 2" and the other plus 2"
- Both animals weighed within 20 pounds of each other live.
- 20 years ago...there was \$400.00 more product on the 2" plus table.
- Lower maintenance costs...year after year

Linear measurement

- I tried to choose nothing less than a “3” to start out
- **Meat-to-bone ratios**
 - 2.0 approximately a 55% ratio
 - 2.5 approximately a 59% ratio
 - 3.0 approximately a 63% ratio
 - 3.5 approximately a 67% ratio
 - 4.0 approximately a 71% ratio
 - 4.5 approximately a 75% ratio

When to calve ... a beef thing

- “Our calves were small compared to the calves produced from the conventional calving season and would have brought us \$50-100 less than if we were fall calving. But we lowered production costs by nearly \$300/cow by eliminating the hay feeding and cow depreciation. (*By calving out of season we could use other people’s late calving and open cows they were culling as our replacements*). Not making a profit would have been like trying to fall out of a boat and not hit water.”

Dick Diven, Low Cost Cow Calf

- According to a study that was done several years ago in Wyoming, the weaning weight difference between calves born in February and calves born in June was only 43 pounds.
- **What do you think it costs to produce those extra 43 pounds during the winter?**
 - We are feeding a cow whom is trying to lactate
 - Using stored forage
 - That is lower quality than your spring grass
 - And costs more to put into a bale.

- Several Wyoming ranchers who moved from winter calving to May/June calving say their individual weaning weights are lower -- BUT they are actually weaning MORE TOTAL POUNDS
- Less sickness and death loss calving in sync.
- Individual weaning weights are smaller –
- The calves are worth MORE PER POUND.
- MORE TOTAL POUNDS that are worth MORE PER POUND!
- And ... You get a higher percentage to breed back and on time every year!!!

Impact of BCS and Day Length on the Postpartum Interval of Cows at 40° N
(Why it is hard to get skinny cows to breed back on time in the winter)

Month	Photoperiod (Hours)	Days Postpartum	
		BCS 5	BCS 6
January	9.2	82	75
February	9.5	79	73
March	10.4	72	66
April	11.7	63	56
May	13.1	53	47
June	14.2	45	38
July	14.8	41	34
August	14.6	43	36
September	13.6	50	43
October	12.2	59	53
November	10.9	69	62
December	9.7	78	71

Impact of Latitude on the Postpartum Interval of Cows in BCS 6
(Fighting mother nature gets more costly the further North we live)

Month	35 °	40 °	45 °	50 °
January	71	75	79	84
February	70	73	76	81
March	64	66	68	70
<u>April</u>	<u>56</u>	<u>56</u>	<u>57</u>	<u>57</u>
May	48	47	45	43
June	41	38	35	31
July	37	34	30	25
August	39	36	32	28
September	45	43	41	38
October	53	53	52	52
November	61	62	64	66
December	66	68	71	74

Our tendency is to forget that we don't live to work, but work to live.

- You can't build a sustainable business on **unsustainable** effort. (*Checking calves every two hours*)
- Einstein could have been talking about ranching when he said, "*the significant problems we face today can not be overcome with the same level of thinking which caused the problem.*"

Change our focus from production to PROFIT by mimicking nature

- What would happen if instead of fighting nature, we worked with nature ... if we tried to help nature do what comes naturally?
- Nature selects animals to fit the environment and so should we.
- Nature fits the reproductive cycle of her animals to match the forage cycle. So should we.
- The cow that calves closest to the longest day of the year is more likely to rebreed on time every year.

Things to take home

- Right now is the best time to see the cows that are the most adapted on your farm
- Think about these areas and how they apply to your dairy or beef herd
- Perhaps you will see different challenges and opportunities on your farm
- If I came to your farm I would only see a “snap-shot” of what is going on.
- Your eyes, brain and wisdom are what are going to enable to you to make changes that will profit your farm and your family

Tailor Made Cattle:

Have tape...Will Travel



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