Three keys to cows you will keep a long time in your herd

"…one observes only things which are already in the mind."

Bertillion French Detective

Please keep in mind that I am going to make quite a few generalizations today. When I make them I am silently saying EVERYTHING ELSE BEING EQUAL

Spend some time now to choose the right cow and SHE WILL DO THE WORK the rest of HER life

Kind of like aero-dynamic devices on trucks

To work in synergy with

THINGS THAT WORK but require HUMANS to do more work and spend time and/or money

1) Adopting a different grazing plan that has positive results
2) Planting cover crops improves soil fertility and animal carrying capacity and performance but requires seed and diesel inputs
3) Using supplements, which they require capital outlays

If it rusts, rots, or depreciates, strive to have as little of it as possible.

The problem …

- Heifers that won't conceive
- Bred heifers that need assistance calving
- First calf heifers that won't breed back
- Females in our herd that don't shed early
- Females that are always skinny (big feed bill)
- Average age of the cow herd in the USA is 5.6 years which requires a 15% replacement heifer crop

My objective is to help you learn to …

- Choose the heifers that will conceive and calve on their own
- Choose and develop heifers that can "eat enough for three"
- SEE glandular function in heifers or cows
- … and the reward would be more fertile heifers that calve on their own and breed back every year until 8, 10, 14 years of age

AND we get back to 10% replacements or less

December 6-8, 2007

Sorted through 1400 cows using the traits we are going to talk about today...

Chose 225 hd~no wormer or hay needed for them

3 ½ months later the rancher sold 900 of the 1175 cows that had to be wormed and fed hay

How often do you cull a cow that gets fat in the winter eating one bale of hay on a snow bank and brings in a healthy calf every year.

Do your cows work for you or do you work for your cows

“It is not what we eat but what we digest that matters.”

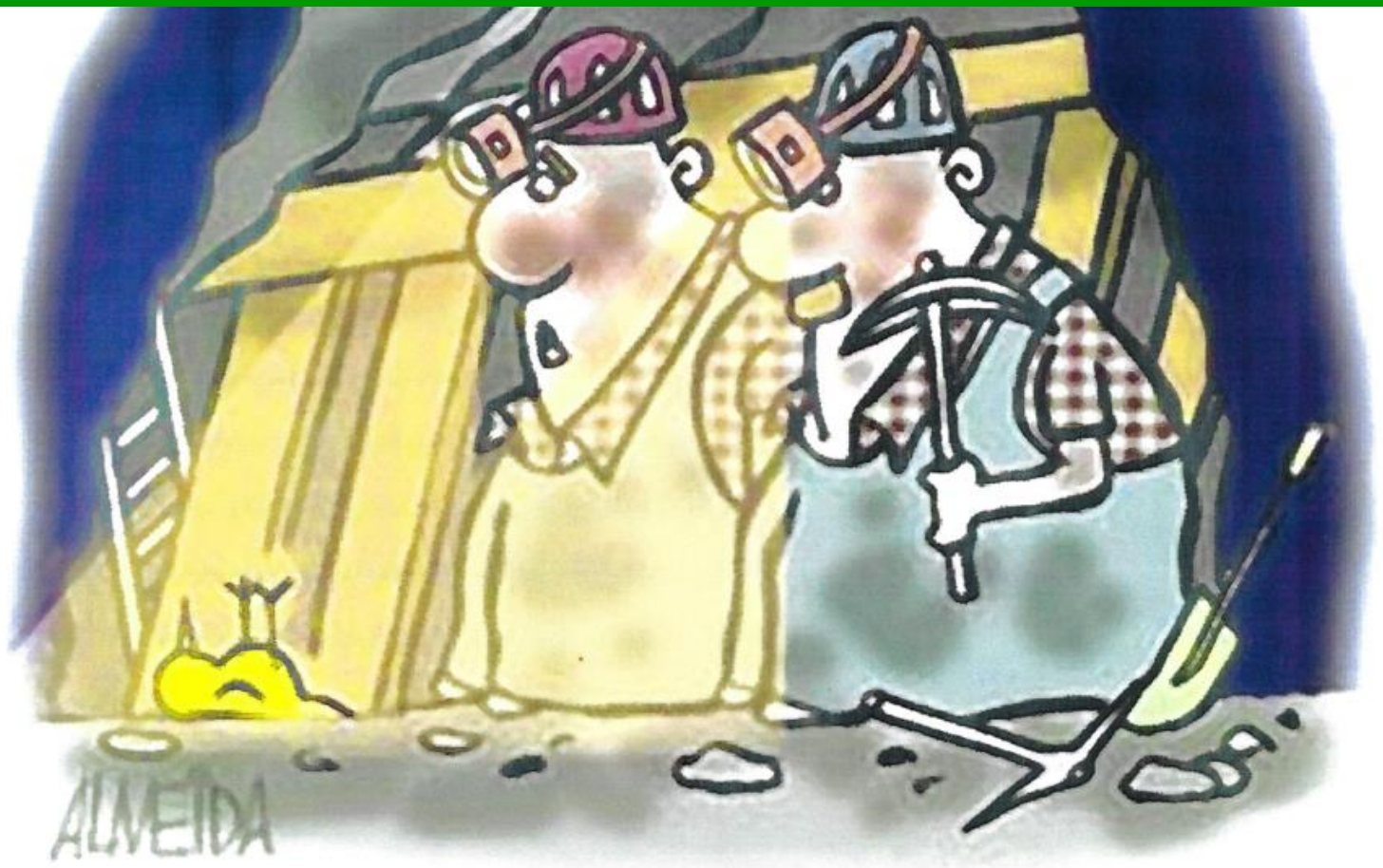
Weston A Price

1. Hormonal function
2. Flank/TL differential
3. Rumen development

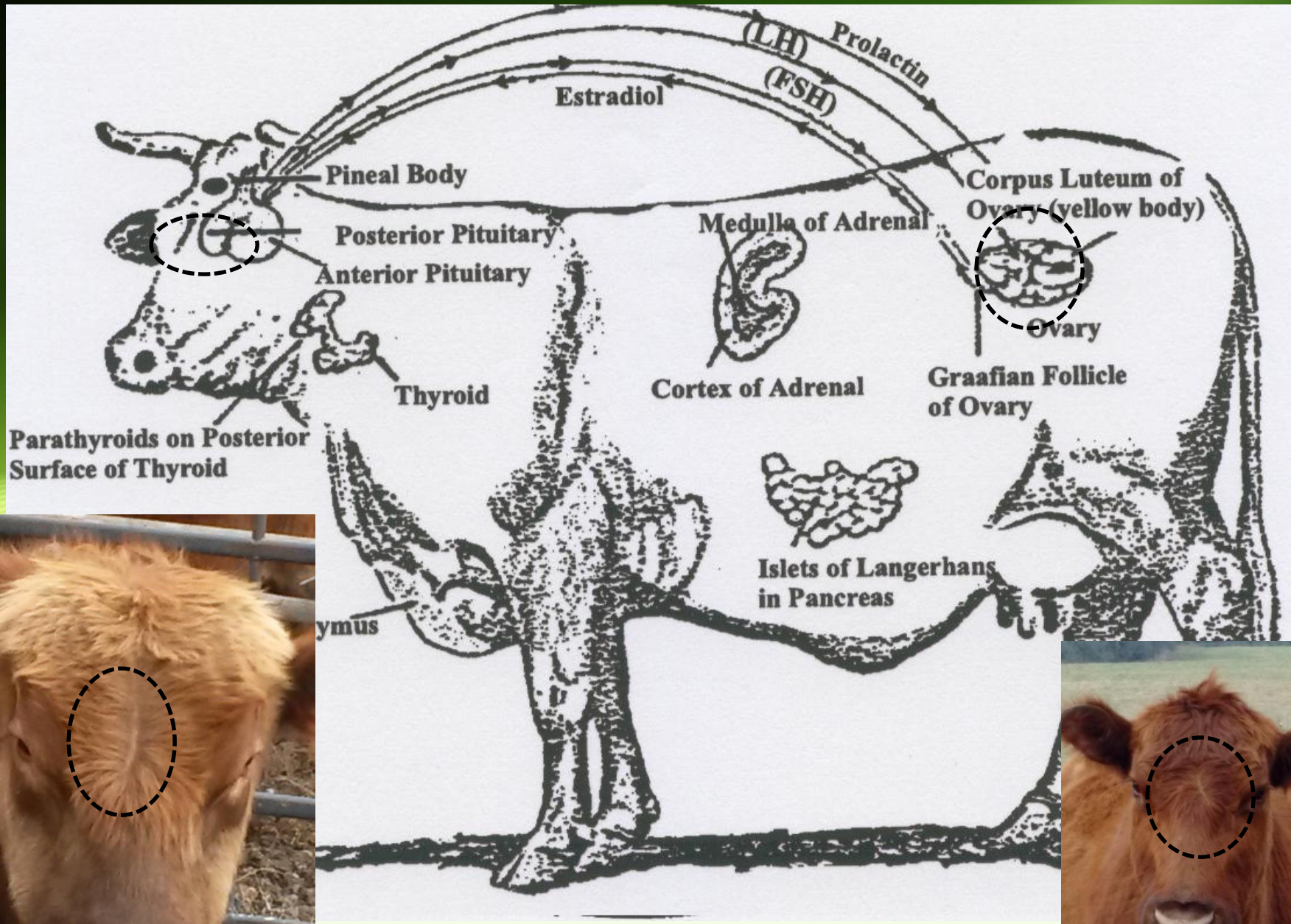
"You can educate a man – but you can't MAKE him think."

Kind of like the horse/water thing

“It’s amazing what you can see just by looking” Yogi Berra



"This means something
but I can't remember what!"



Man Must Measure Dr. Jan Bonsma

Selection for hormonal function, fertility, butterfat, and tender meat

Pointed poll

Neck folds

Unusually small, short legs

Rib bone

Jaw Bone

Tail/Ear Butter

Broom tailed cow

Bald udder

Extra teats

Escutcheon w/folds

EARLY SHEDDING

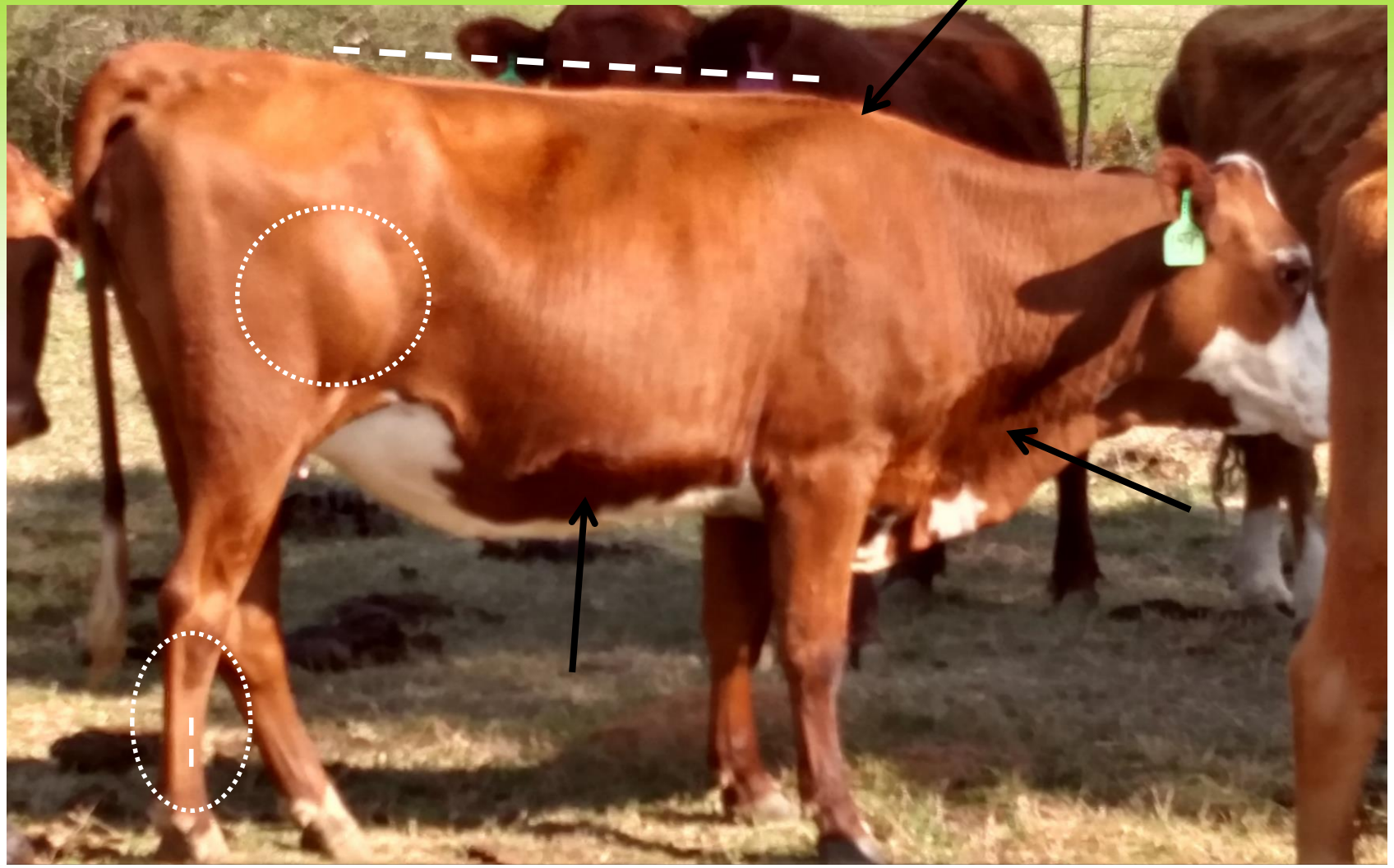
Adrenal in the right place

Balance

Single trait Selection Sometimes Gives what We don't want

If we have a number of the following indicators we can be more sure of having the trait. The fewer we have the less likely and the poorer the result

Healthy glandular system, hide and hair coat



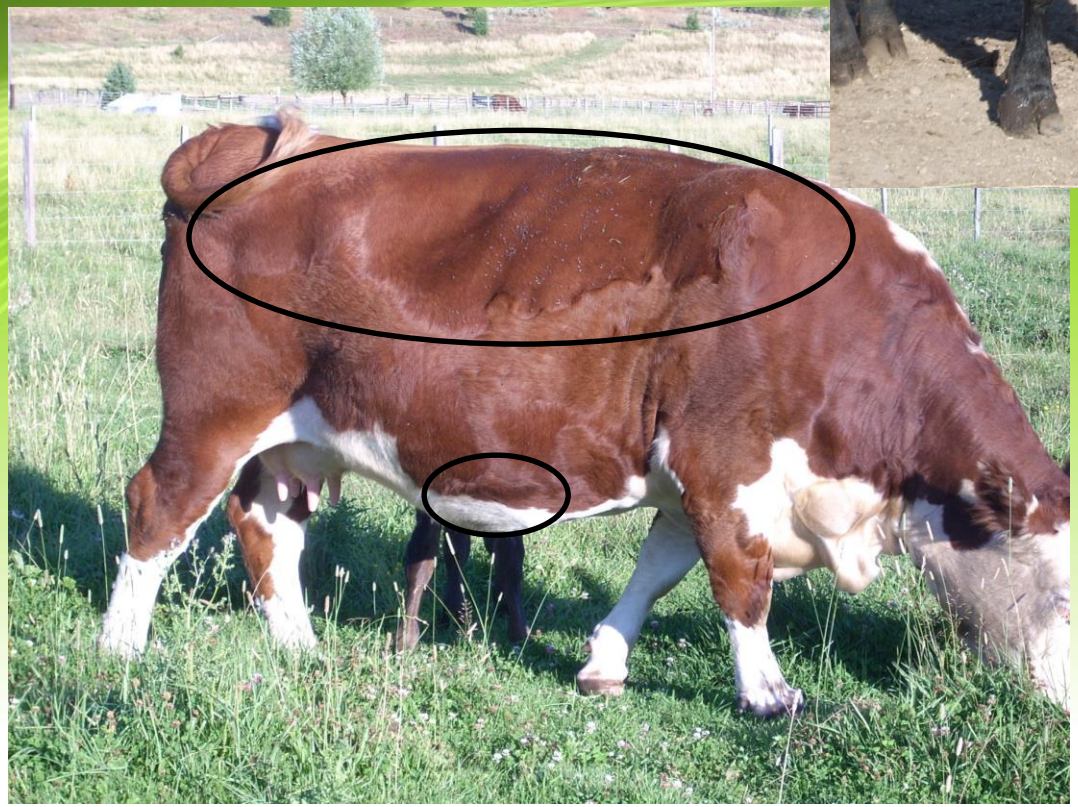
Dr. Bonsma's one thing

Two horned cows walk into a bar …

Estrogen's influence on "long bone" growth

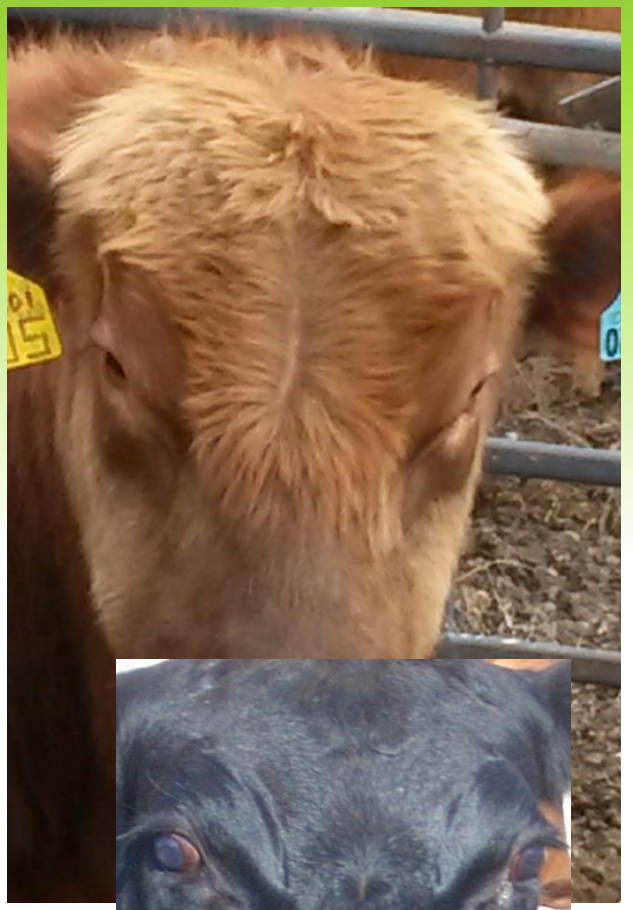
Page 5 of Bonsma Lectures

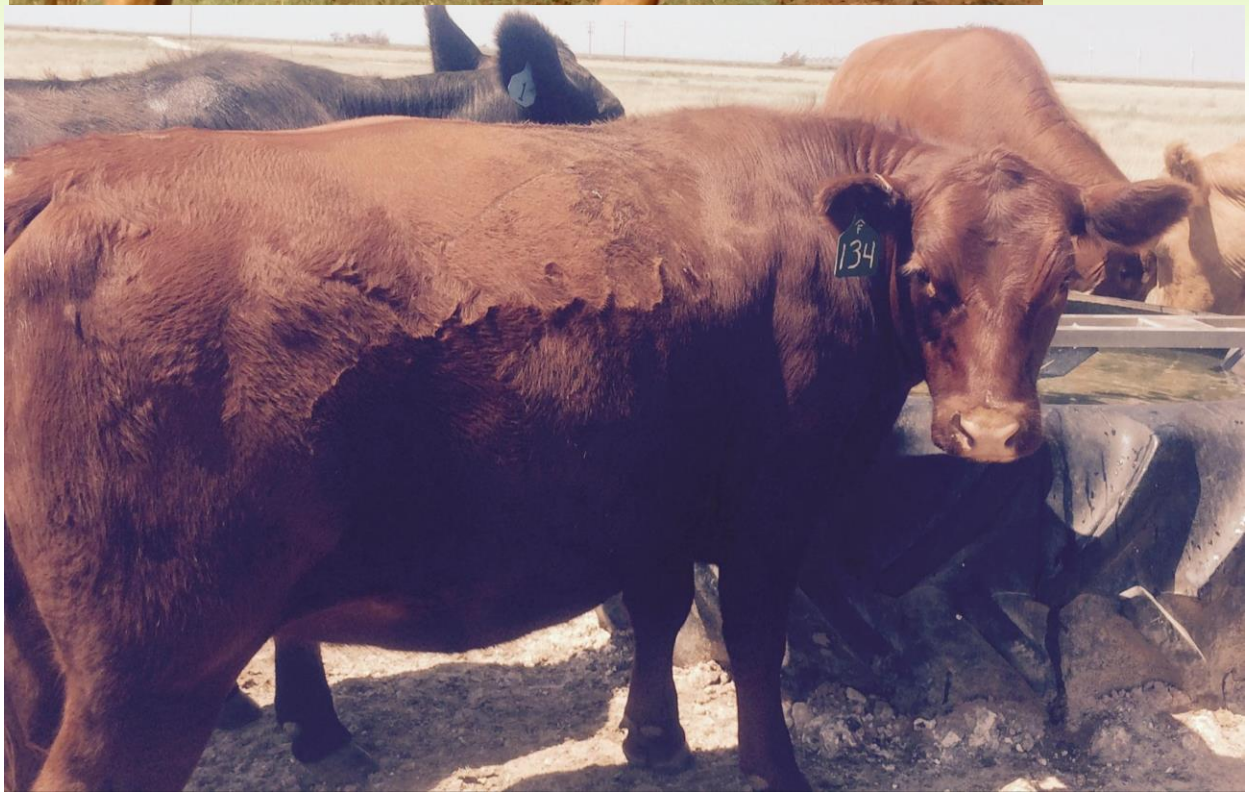
Selection… where to start?



A hair whorl is a patch of hair growing in the opposite direction of the rest of the hair

GREAT Pancreatic Hair ~ Whorls~ BAD Pineal

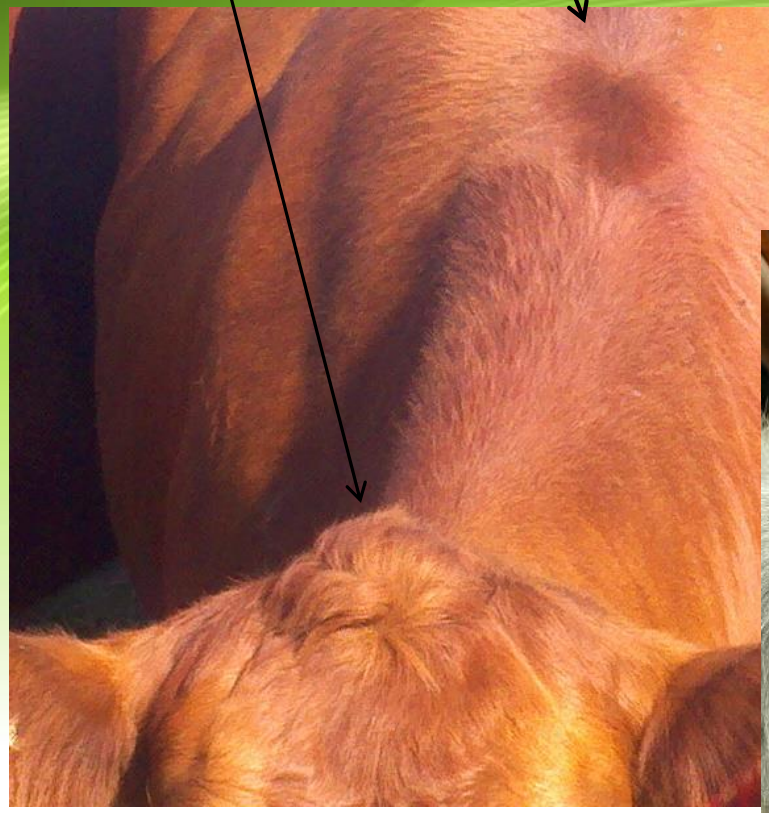


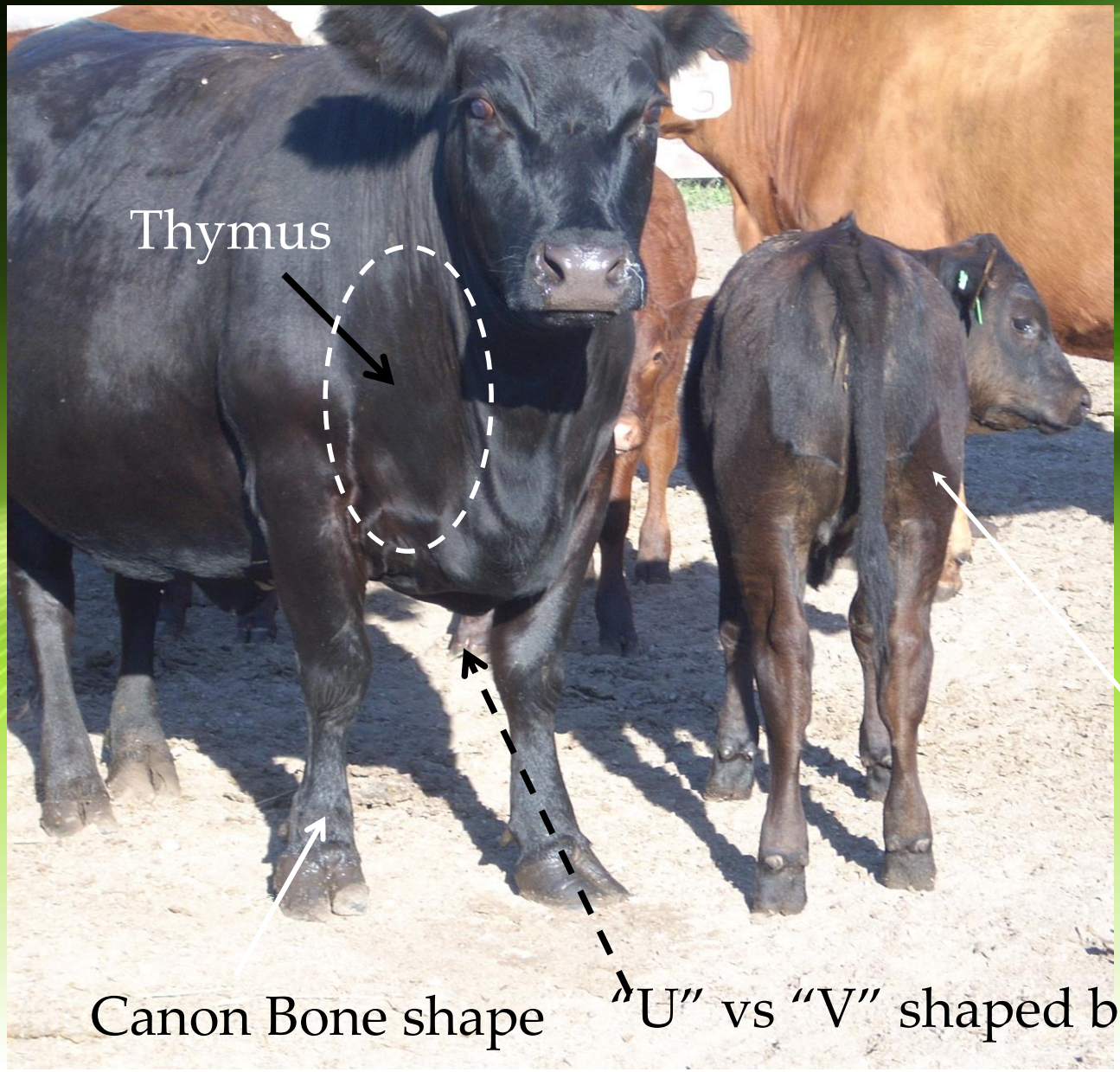


Hide Folds

Adrenal *When does hair lay down*

Pointed Poll



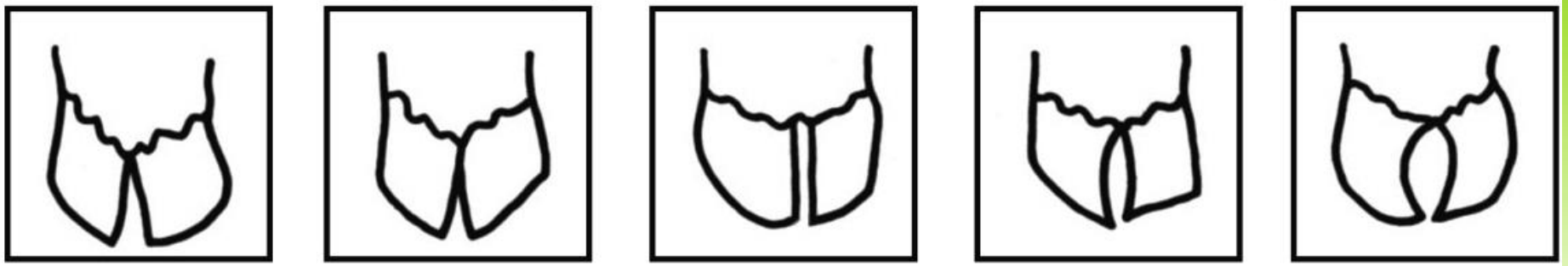


"The mind that opens to a new idea never returns to its original size."
~ Albert Einstein

Escutcheon

• **Tender**	OK	Tough
• **( ) knee**	( ) Knee	( ) Knee
• **/\ Cannon**	11 Cannon	) (Cannon
• **(ll) Hoof**	()() hoof	(()) hoof

(Reference: Shape (primarily curl) and evenness of the claw set.)



3 4 5 6 7

extreme scissor claw

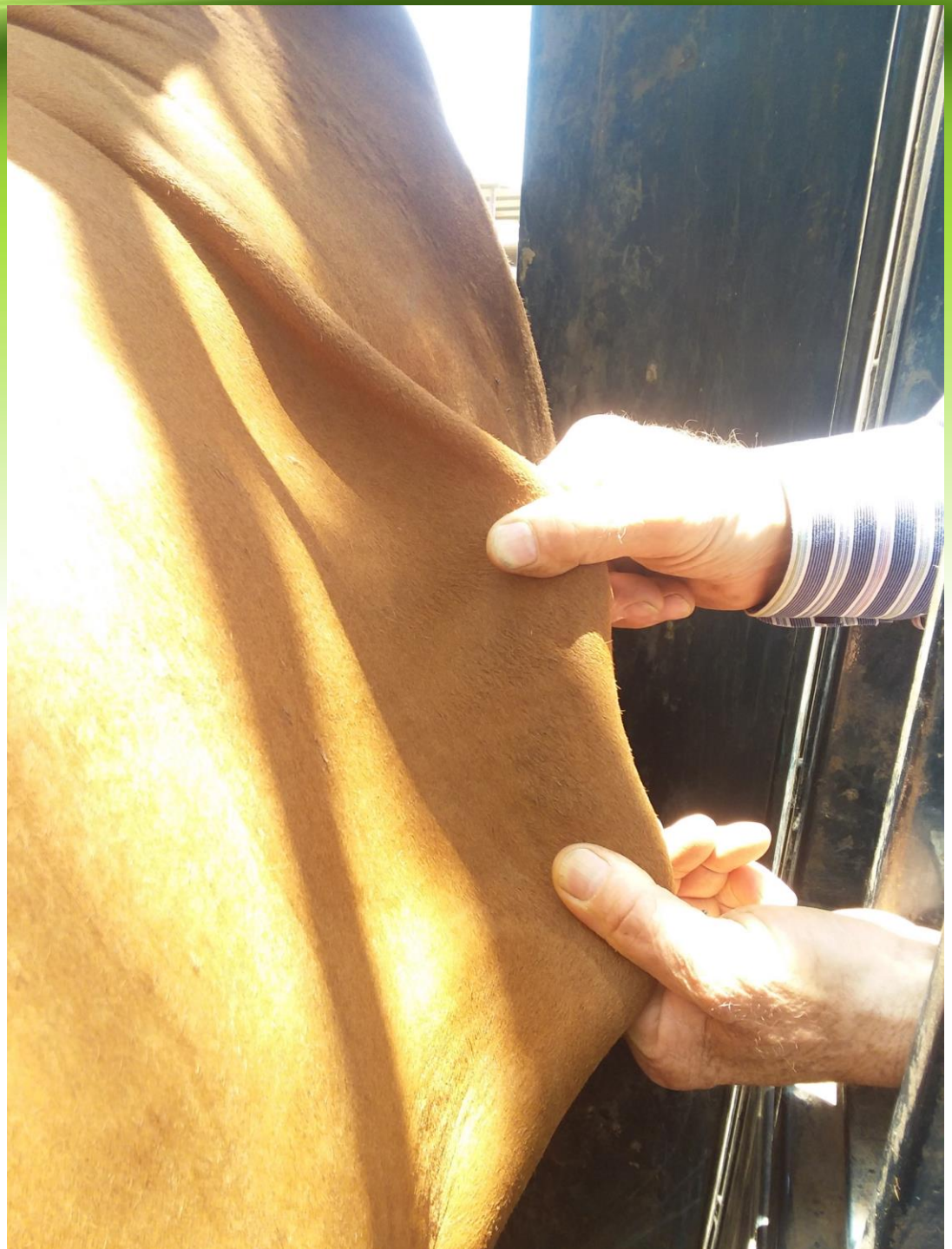
d rear feet angle (Reference: Strength of pastern, depth of heel and length c

3 4 5 6 7

od; 9 – shallow heel

Rib and jaw bones … Flat or concave

Soft, loose hide = Tender beef and Butterfat and better Glandular Function



Flat Tail
More butterfat

Round Tail
Less butterfat

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."*

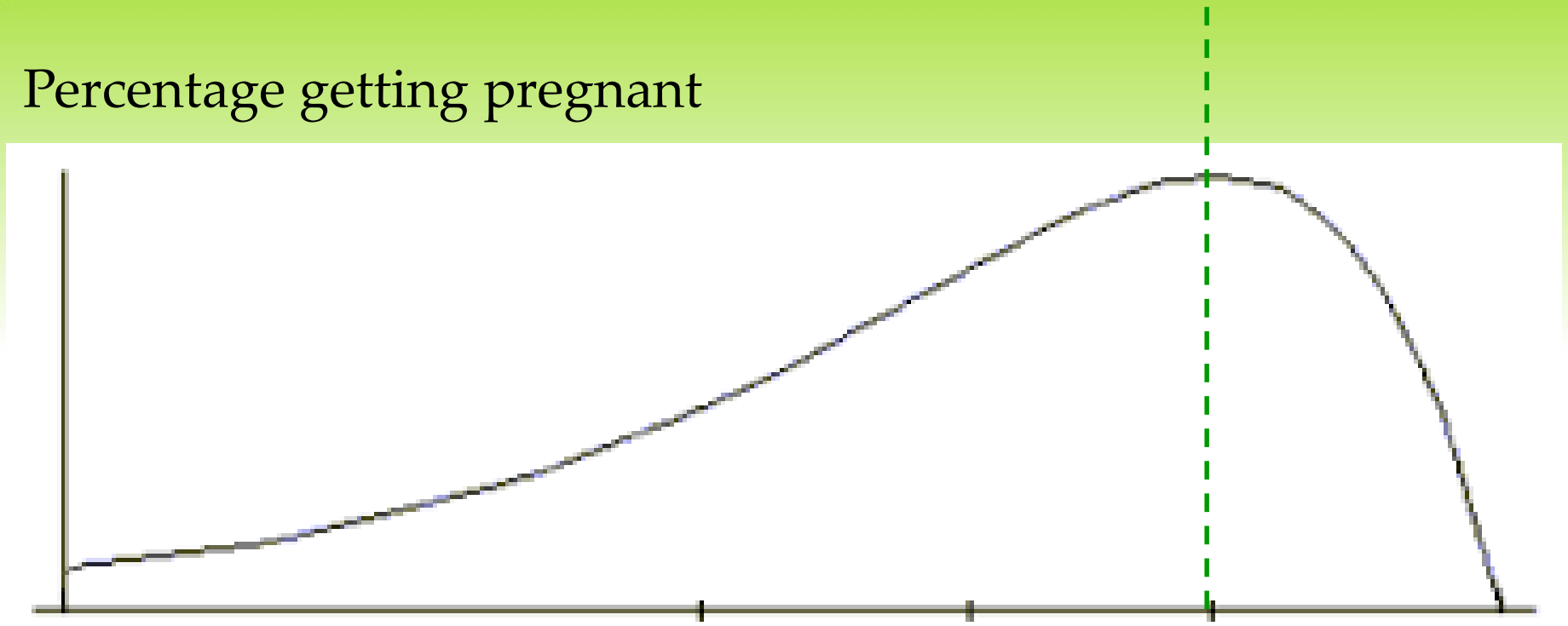
National tribute of the French Government
Paris, September 17, 1848

Bald udder & nipples

Teat size and shape are determined by glandular Function

A tipping point in fat level

Percentage getting pregnant



Low G/F, B/F, poor Phenotype
Low minerals High toxins

Cow fertility

too fat to breed
high toxins
Fat attracts bad stuff

These visual indicators can help you select animals that have a production advantage

- HORMONAL FUNCTION
- HIGH BUTTERFAT
- Internal/external parasite resistance
- Early shedding
- Maintain body condition
- Tender meat

Questions on this part???

Three things about measurements of the cow

1.Glandular function

2. **Three measurements**

3) Rumen development

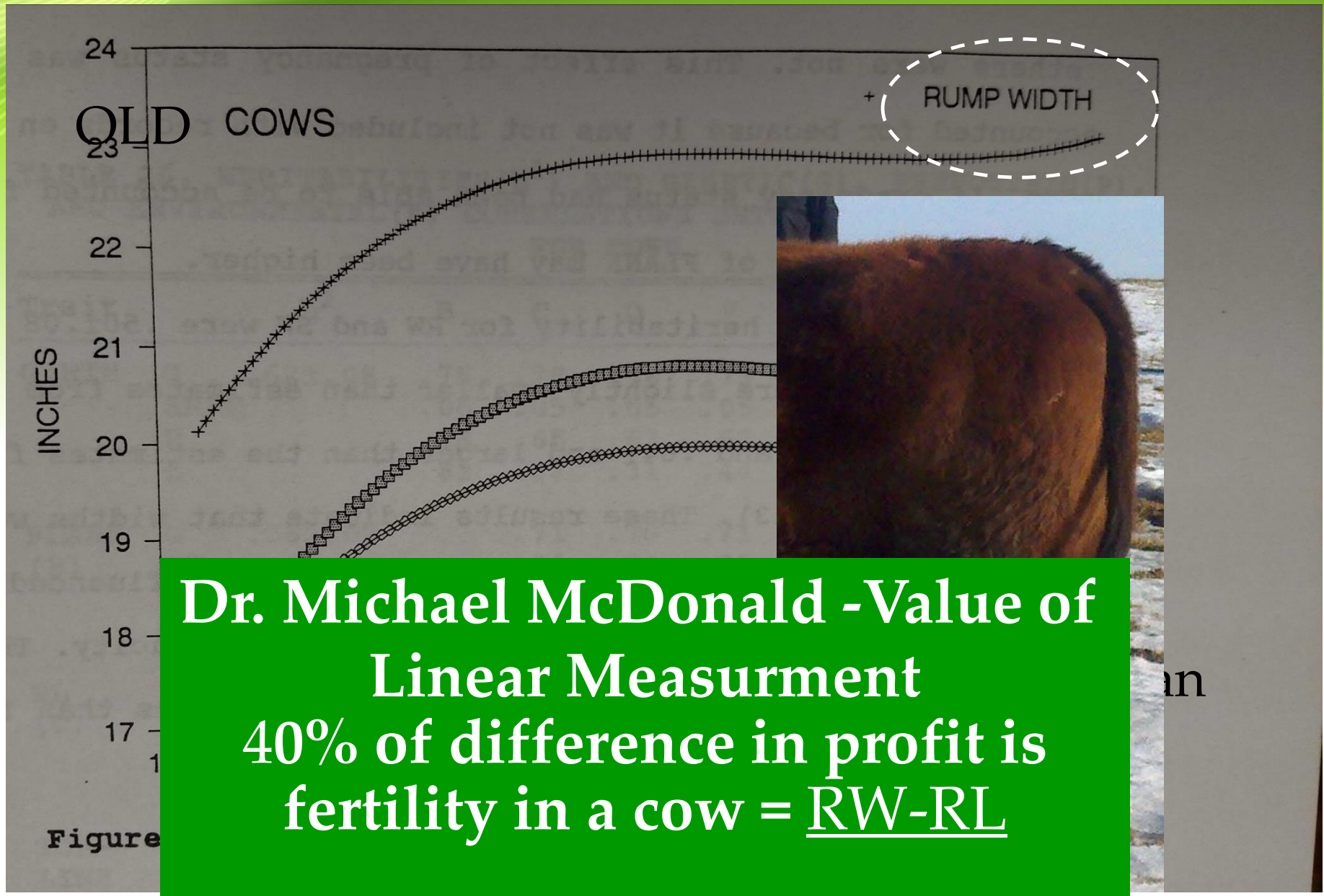
1) Wide butt 2) Big belly 3) slope of pelvis

Linear Measuring the Bull & Cow For a SHAPE for Reproduction and feed efficiency

Linear Measurement accurately and objectively evaluates what the animal's structure is.

I want to teach you how to use the ratios to select for fertile and long lived cows.

NOT a single trait selection tool



Dr. Michael McDonald -Value of Linear Measurment
40% of difference in profit is fertility in a cow = RW-RL

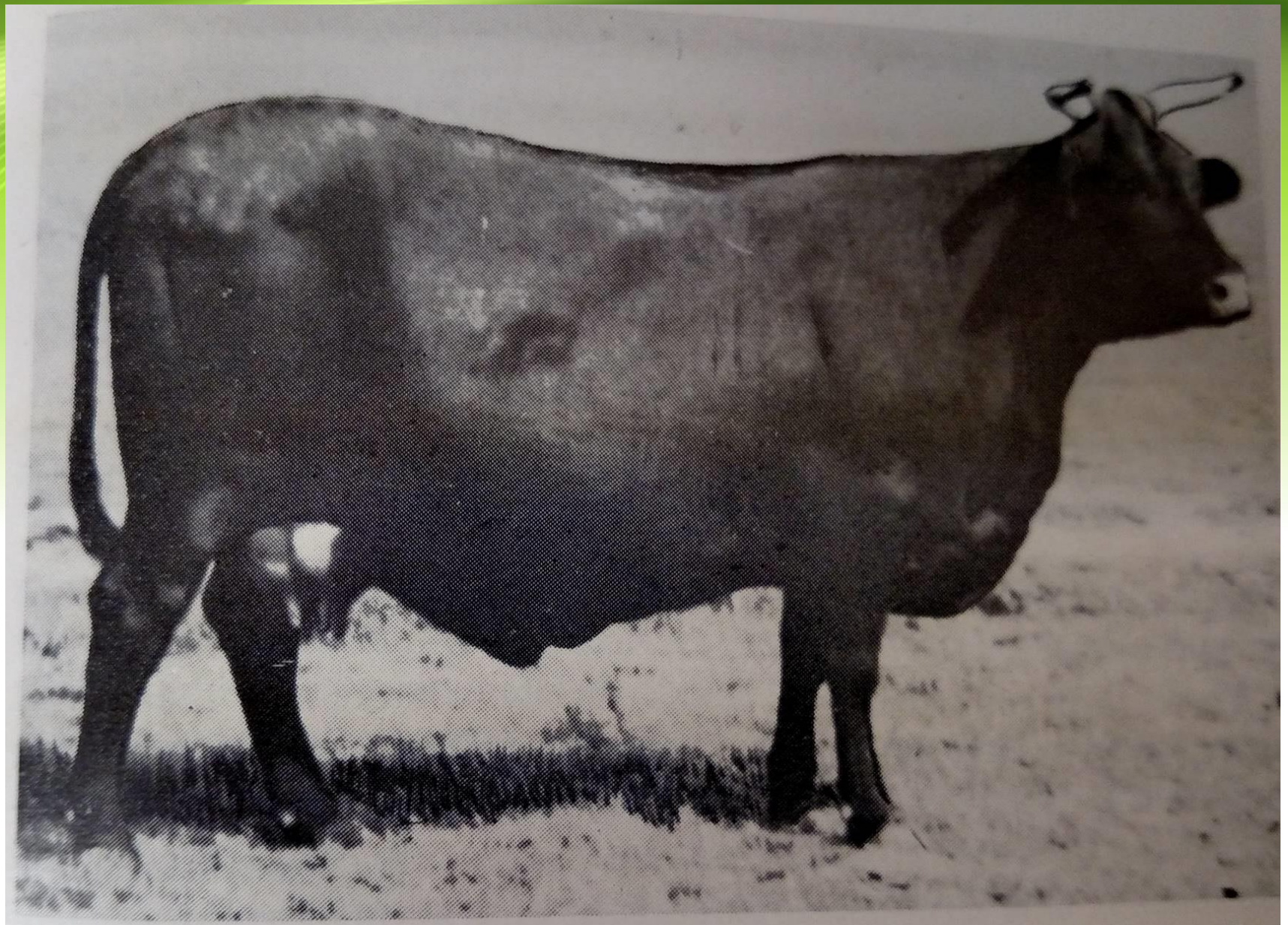


FIGURE 42. A highly fertile Santa Getrudis cow. Note feminine head, lean cheek flat neck, lean brisket and shoulders. Also note the length from the hip to the p

- Don Faulkner, University of Arizona 2014
- *"We are getting very good at predicting what a group of open cows, pairs, yearlings, bred heifers, etc. will consume depending on whether fed grain, ensilage, alfalfa, grass hay, etcetera. What we can't tell you is what individuals in those groups will consume ."*
- ***"Some animals consume half as much as other animals in those groups."***
- **IF** the group is averaging 3% of Body Weight, and Professor Faulkner is correct, some are eating 2% and others 4%

Anibal Pordomingo

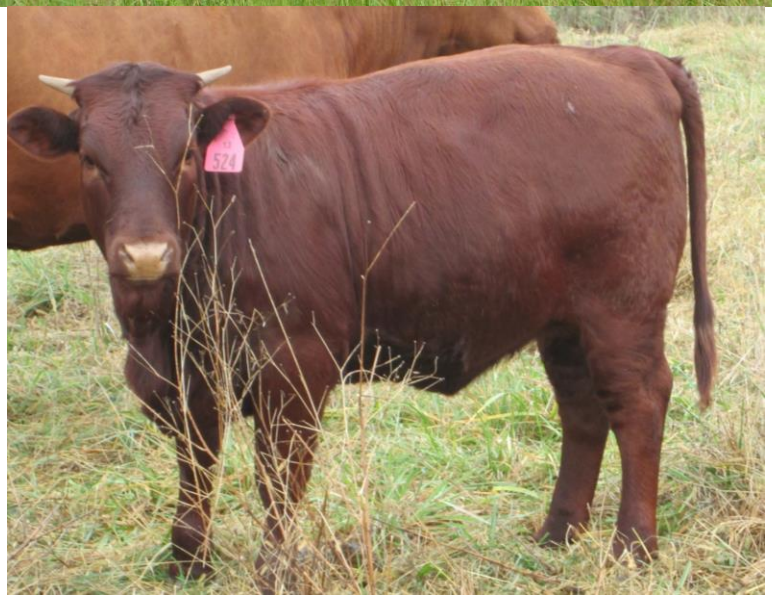
The senior researcher at the National Institute of Agriculture Research of Argentina (INTA).

- Had researched and found that the average beef cow in America only digested 55% of what she ingested.
- **THEN** he heard Gearld Fry talk.
- He went back and looked over his data and found that **SOME** cows digested 70% of what they ingest.
- Hmmmmmm…that means some were only digesting 40% of what they ingest!!!!

Dr. Michael McDonald -Value of Linear Measurment
30% of difference in profit is Keeping cost of a cow

A flank (2-8″) larger than the girth equals lower feed costs ... for the next <u>TEN-FIFTEEN years</u>
Minus girth and flank equals higher feed costs …for the next <u>TWO-SEVEN years</u>

Vast majority of breeds were developed to fit their environments perfectly with only their master's eyes, hands and wisdom.



Linear Measurement – Female

The "wedge" look

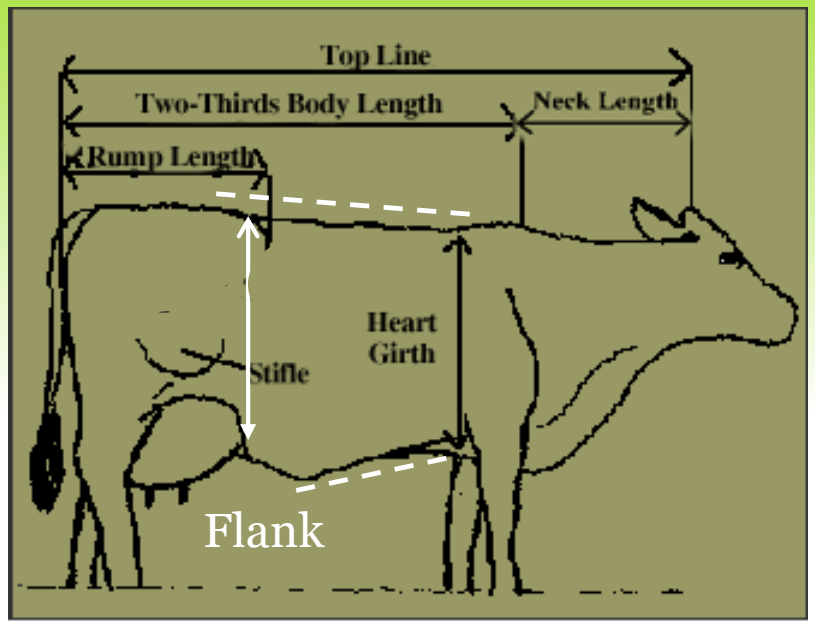


Figure 1

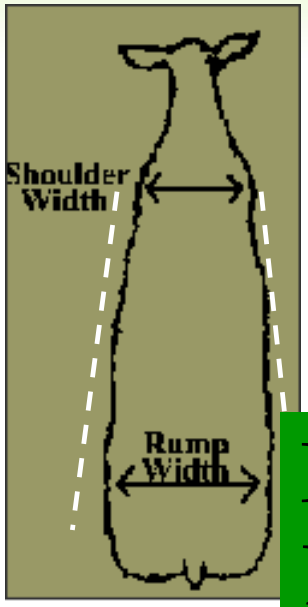
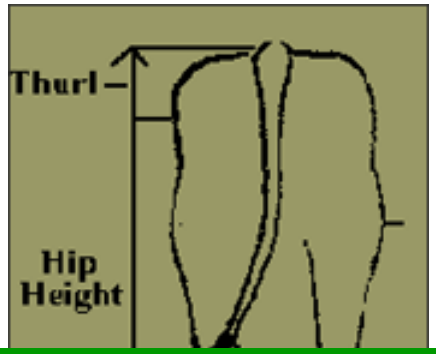


Figure 2



Fertile cows should walk "down hill"
Estrogen shuts off long bone growth on the front end of a female first

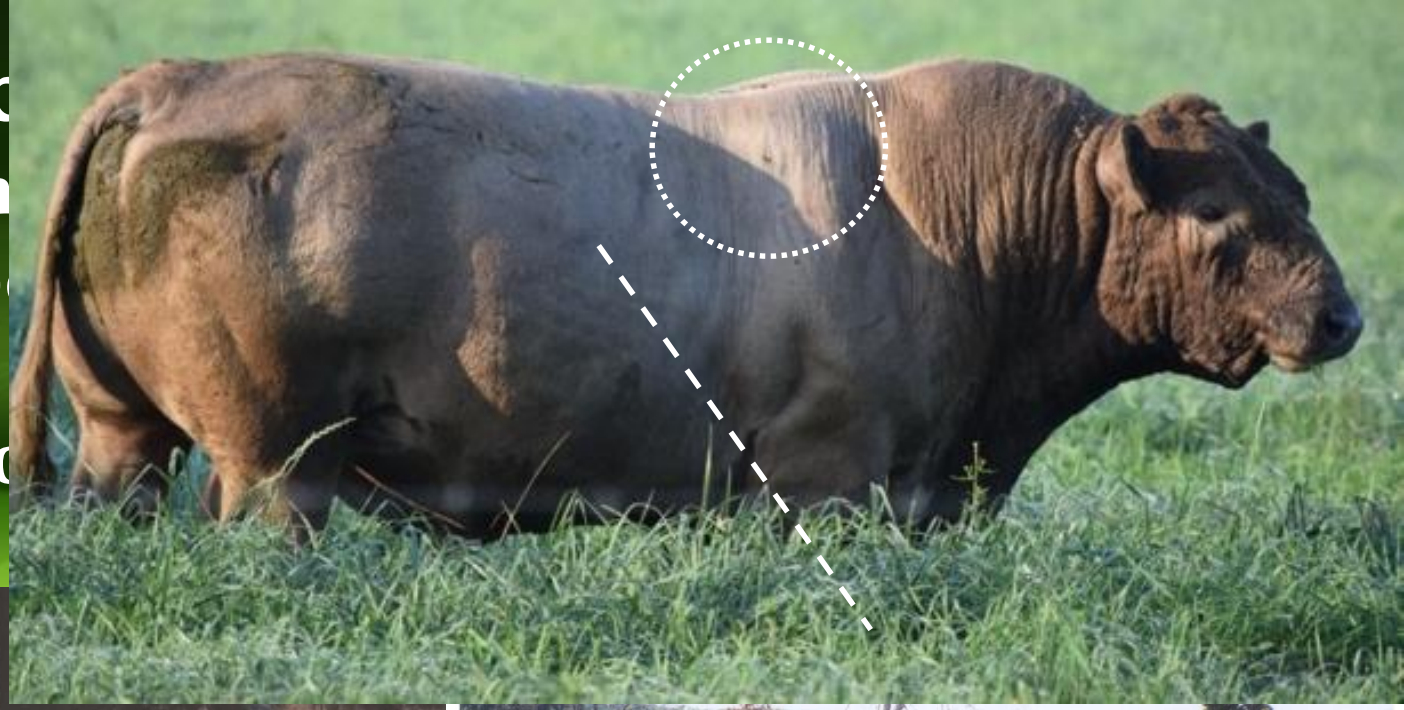
I want effic

If the cow on

of bo

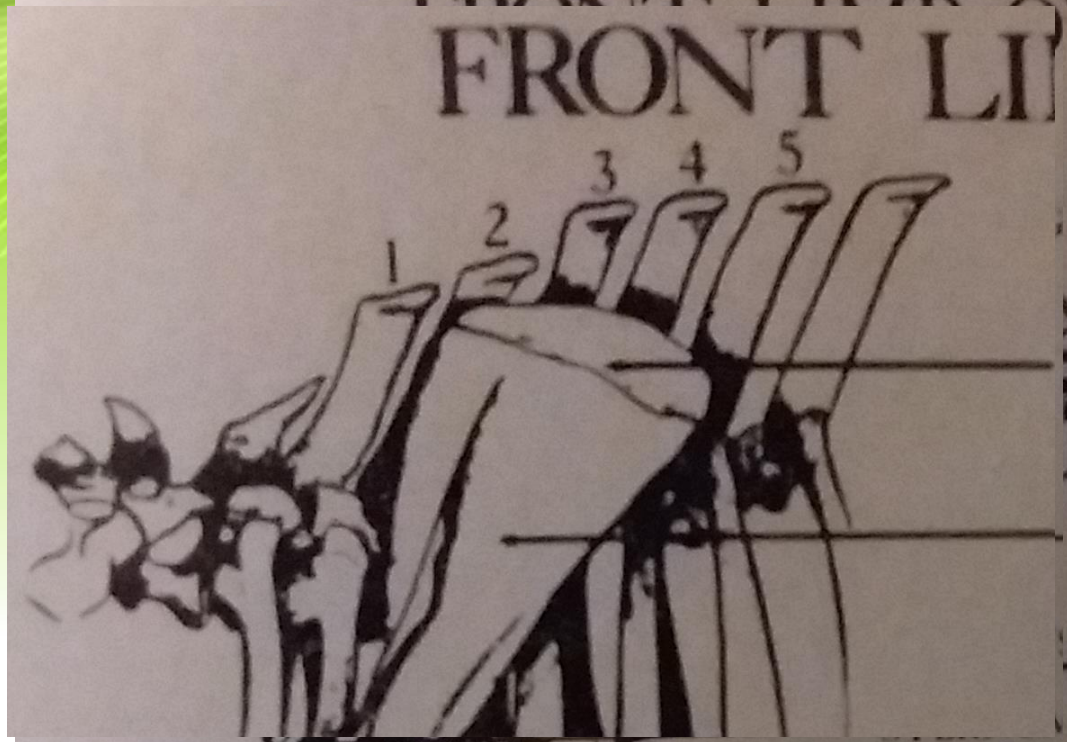
If the cow on

of bo



We should NOT be looking for a WEIGHT of cow

The SHAPE and HORMONAL FUNCTION in a cow



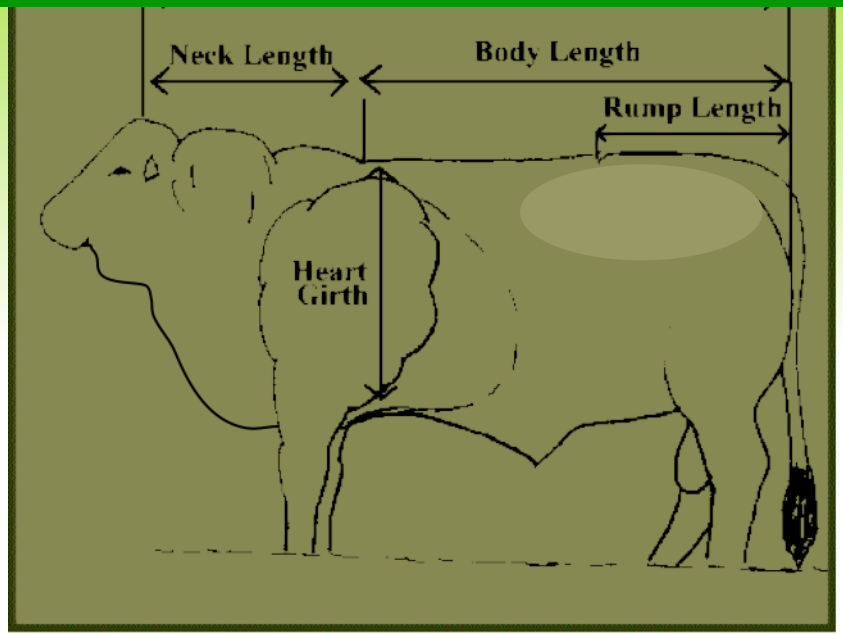
RADIUS

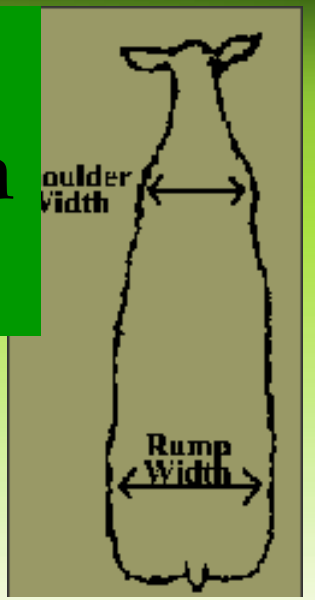
META CARPUS

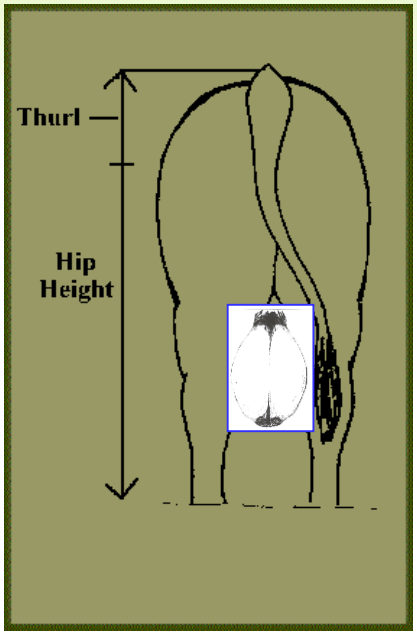
Infertile

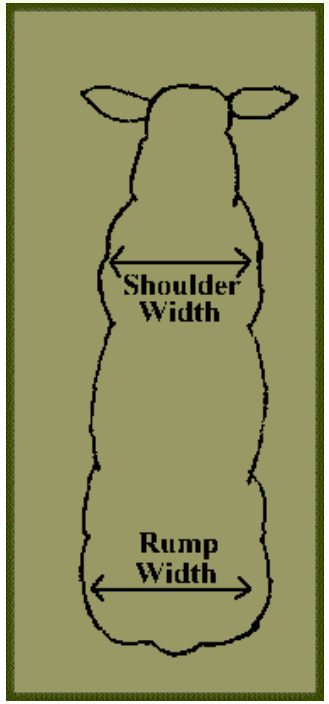
Fertile

Fertile bulls should walk "up hill" Testosterone shuts off long bone growth on the hind end of a fertile male first



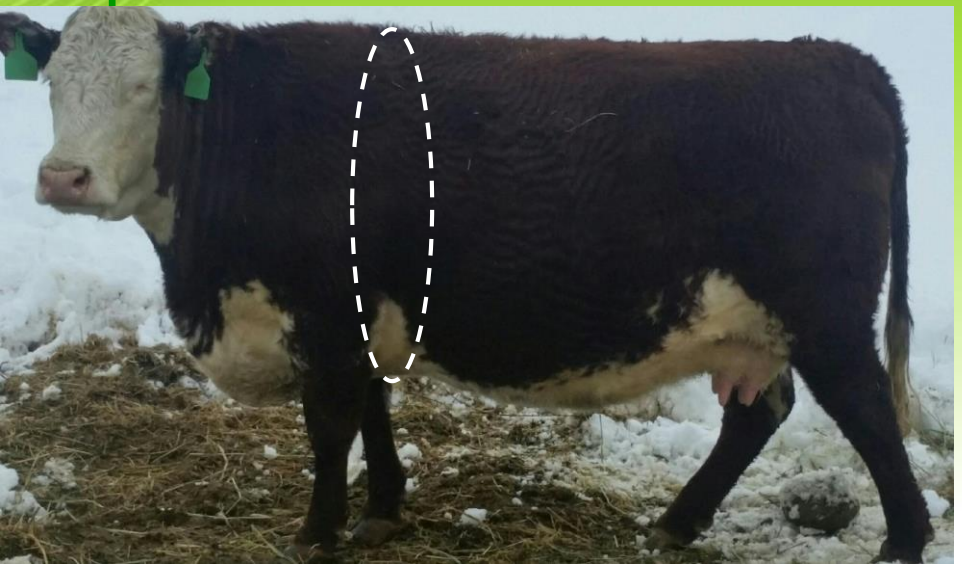


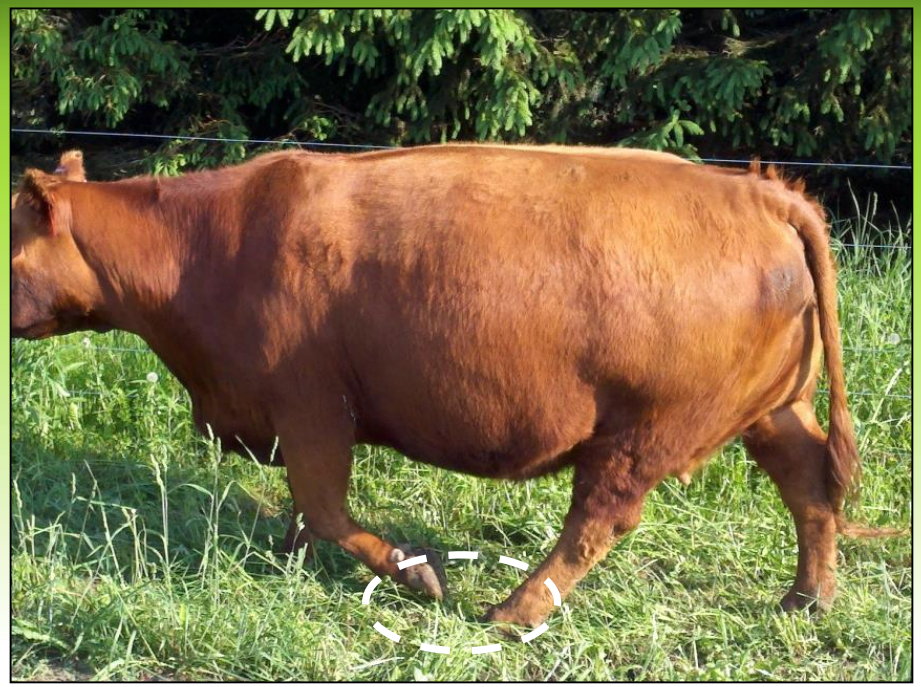




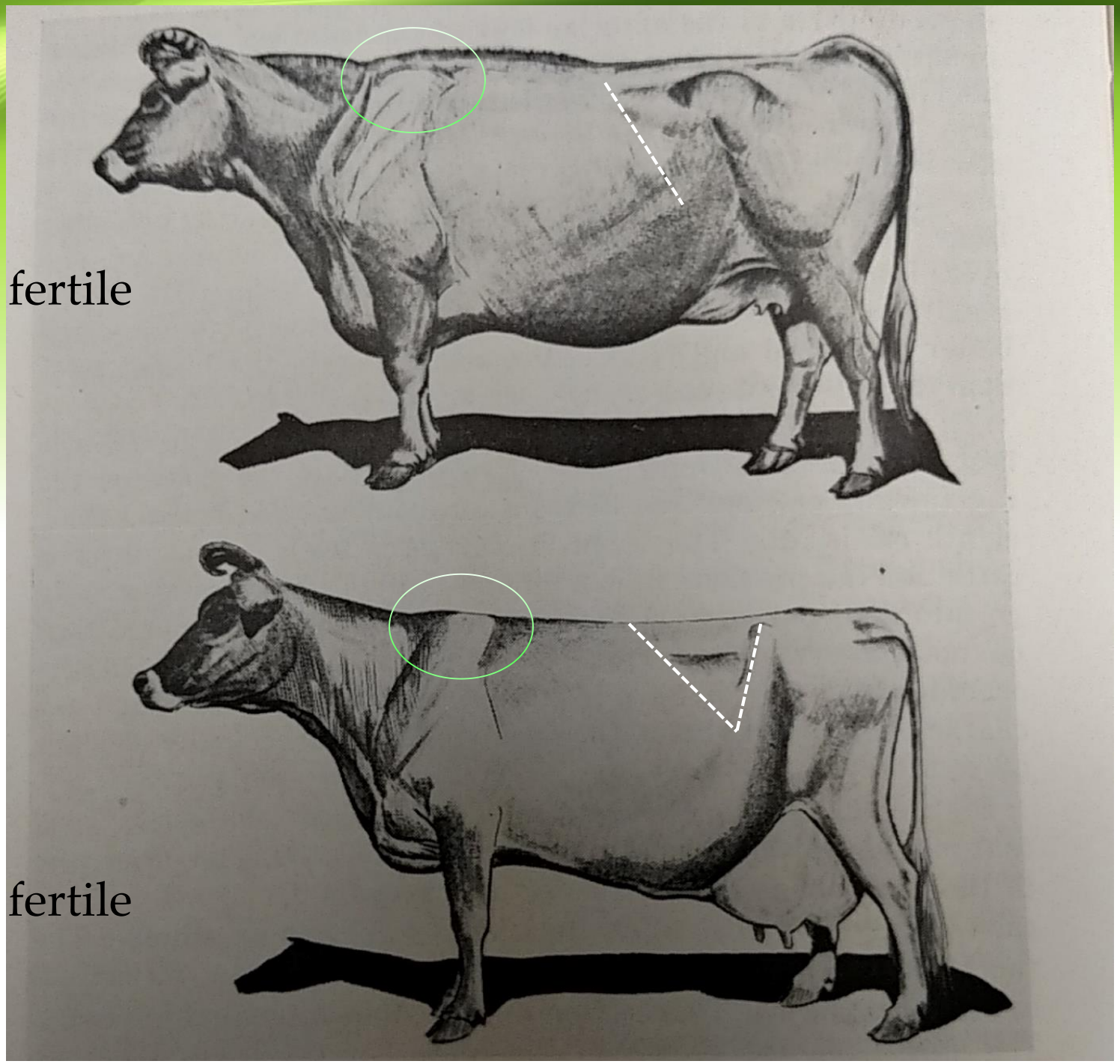
11 Measurements

Wedge shaped bottom line Toes straight forward and the back hoof landing in the same track the front just left





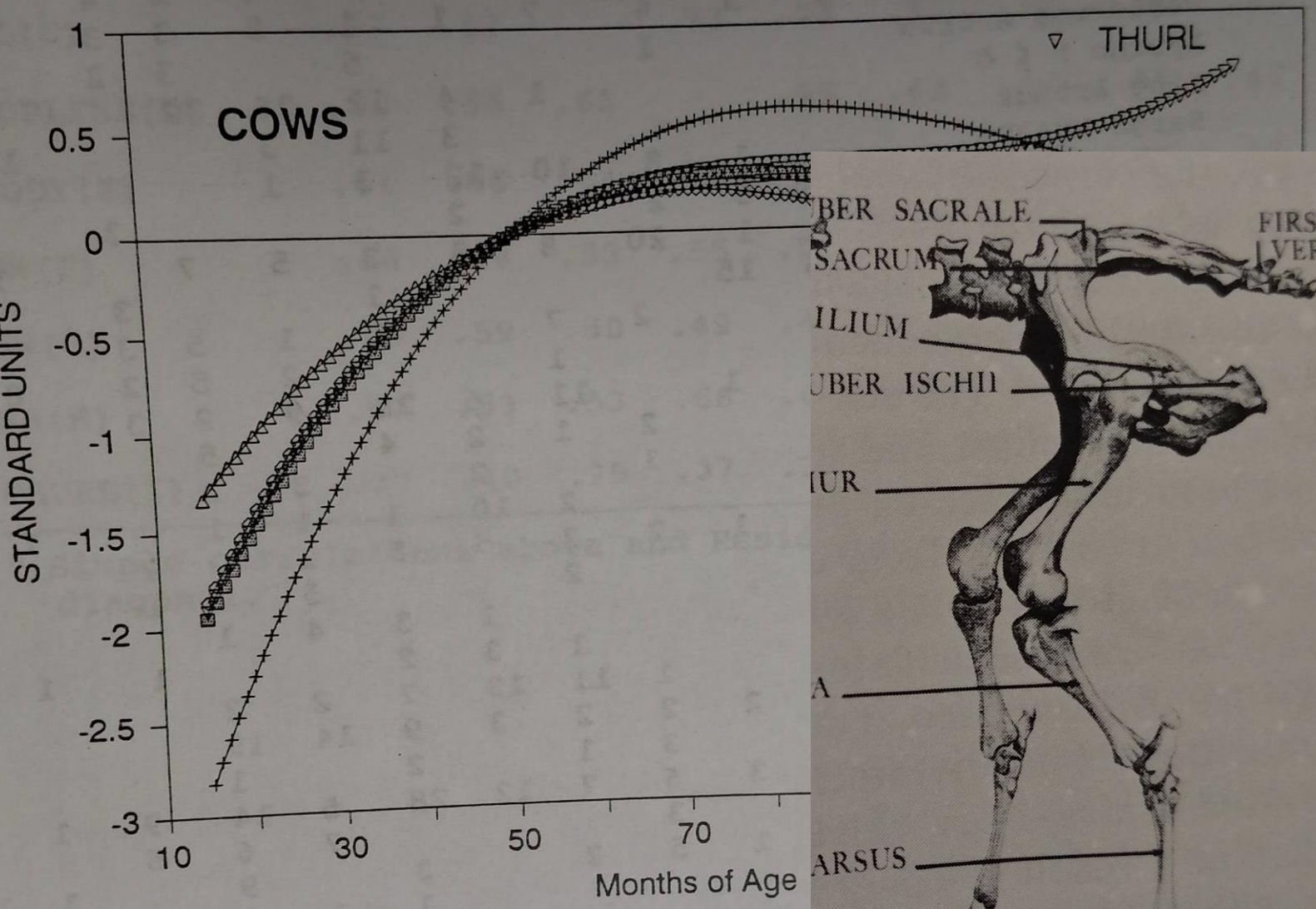
Less fertile



More fertile

Angle of rib bones

Jan Bonsma



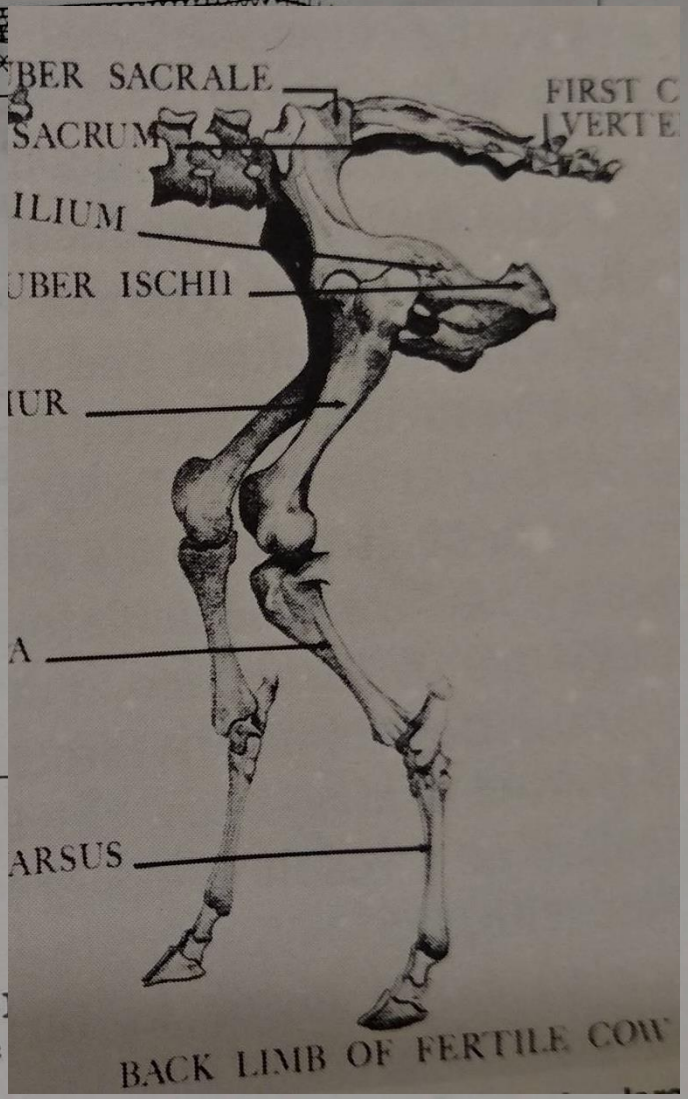
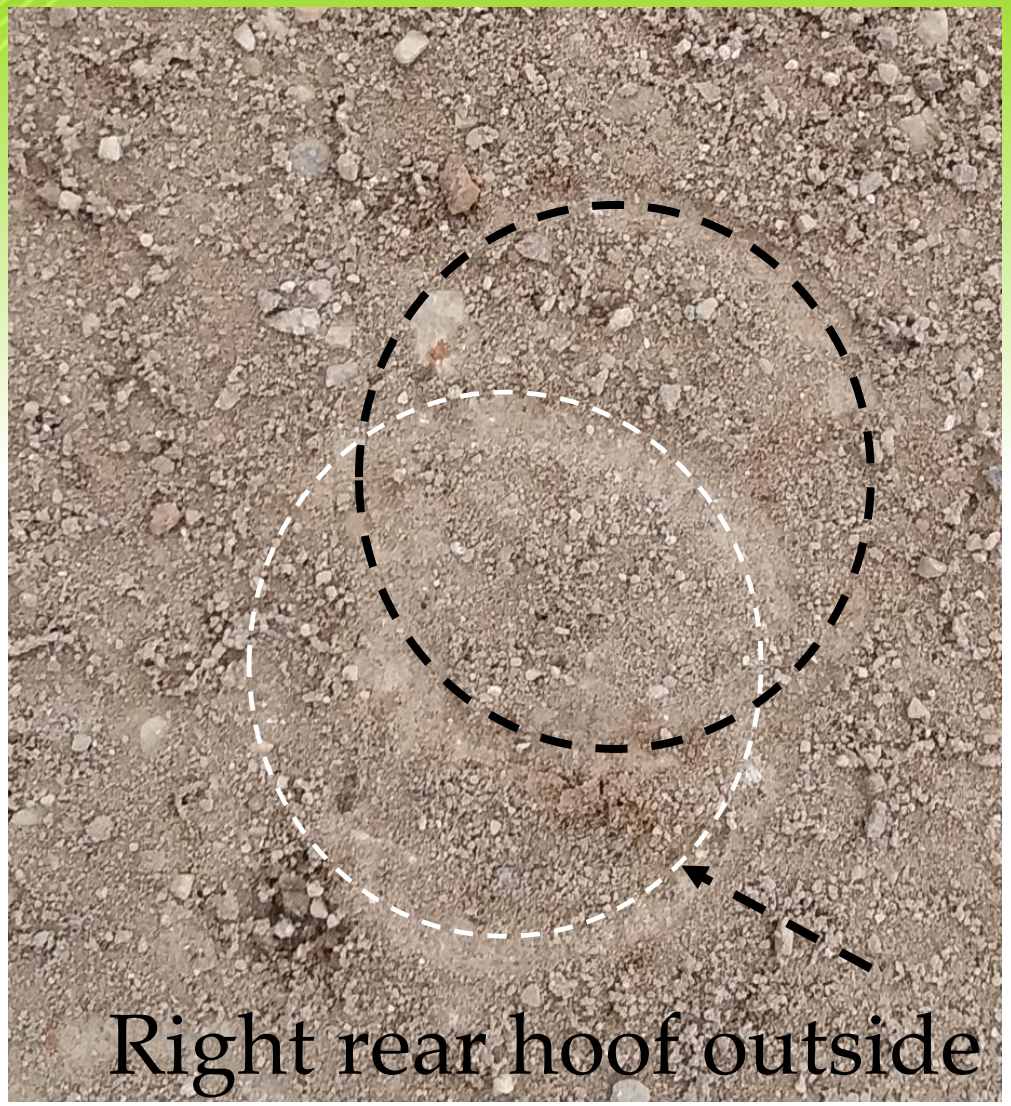


Figure 16. Regression of GIRTH, TOP
AGE in standard measure

COW wide rump

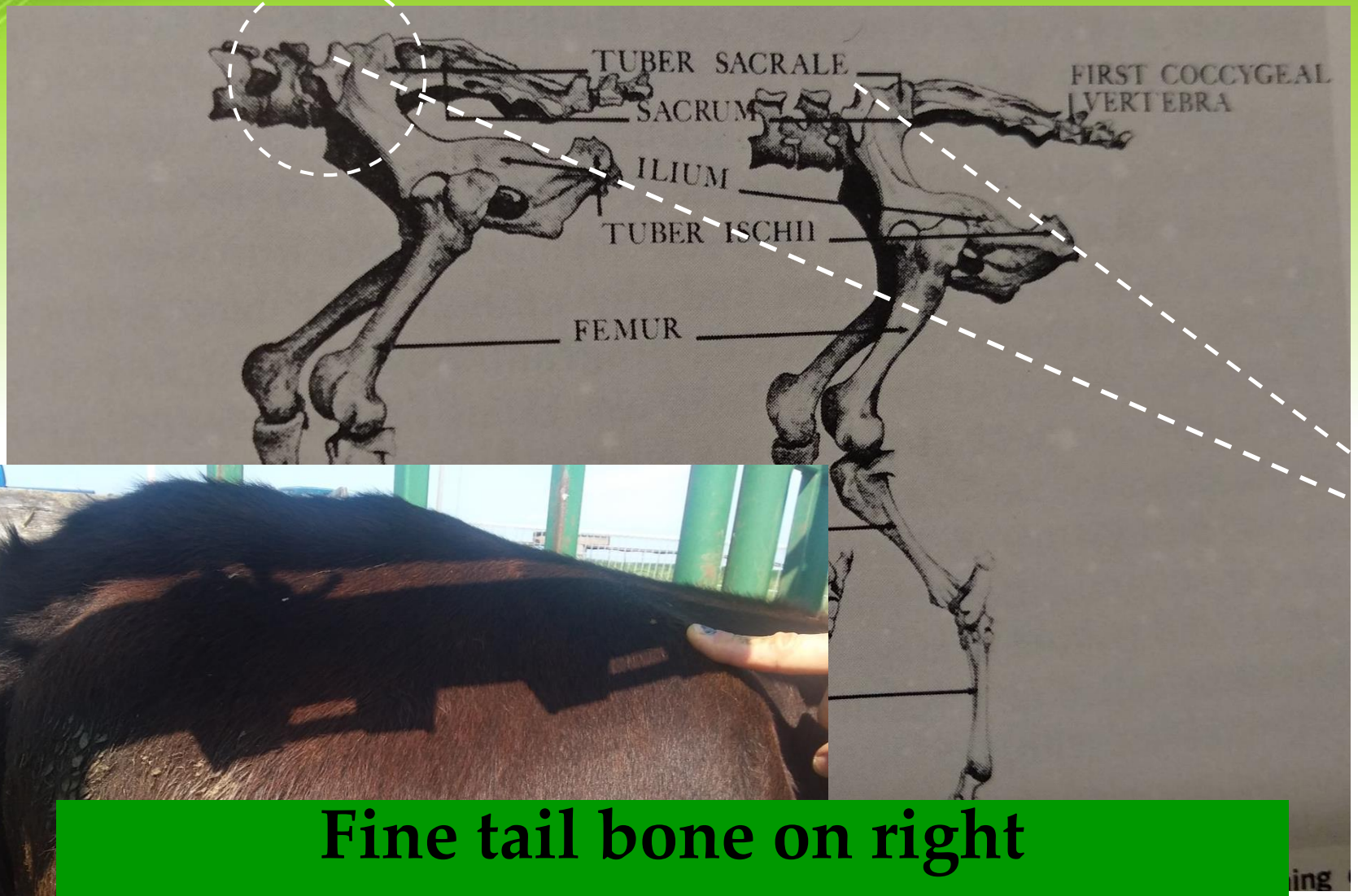
BULL wide shoulders



Hoof on Hoof

Short Step

Calving Ease…from the FEMALE side



Fine tail bone on right

Questions on Linear Measurement???

10% of first calf heifers don't re-breed

What linear measurement #'s will I use to "**head this off at the pass**" on selection day?

Flank 2" greater than Top Line ~ or more

Rump 2.5" wider than long ~ or more

(Fertility)

Girth equal to Top Line~ or more

Slope from hooks to pins

On weaning day, select replacements and then leave her nursing her mother until 10 months of age for rumen development so she can eat for three for the rest of her life.

“It is not what we eat but what we digest that matters.”

Weston A Price

1.Hormonal function

2.Flank/TL differential

3.Rumen development

What does a fully developed rumen do for the animal

Allows them to get more out of what they eat.

Anibal Pordomingo

55% average in the USA

70% utilization with the right type

40% with the wrong type

"It is not what we eat but what we digest that matters."

Weston A Price

- Don Faulkner, Arizona of University 2014
- *"We are getting very good at predicting what a group of open cows, pairs, yearlings, bred heifers, etc. will consume depending on whether fed grain, ensilage, alfalfa, grass hay, etcetera. What we can't tell you is what individuals will consume in those groups."*
- ***"Some animals consume half as much as other animals in those groups."***
- If the group is averaging 3% of B/W, some are eating 2% and some 4%

  If we only get half way there
- **1000 # cow X3.5% = 35 pounds of feed/day**
- **1300 # cow X 2.5% = 33 pounds of feed/day**

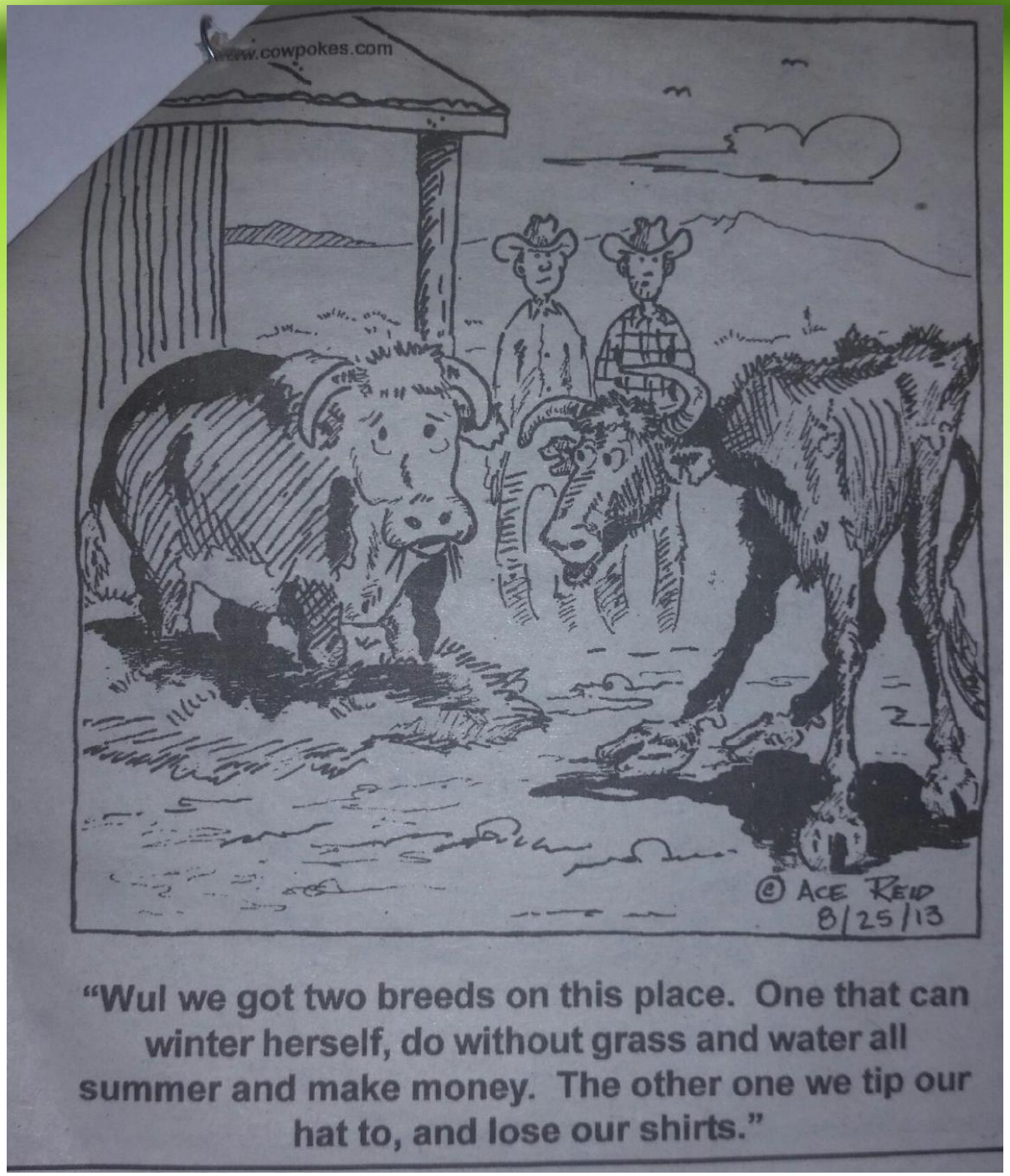
Increasing rumen function naturally

- Come weaning day, select your replacements and **put them back with their mothers**. You may have to supplement the mothers for one winter, but the replacement heifers will **cost YOU less to feed rest of their lives**.
- *Sort off the dinks and a few hours later turn them back with the cows. They will help you identify your poor performing cows…**so you can sell those COWS**!!!*

"... some are consuming half as much as others!“

“Some digest 70% of what they ingest.”

Cartoon by Ace Reed



Some are eating half as much as others

- If I have **thirty-eight** 1000 pound cows eating 4% of their bodyweight, that is 1500 pounds of feed.
- If I have **fifty** 1000 pound cows consuming 3% of their bodyweight, that is 1500 pounds of feed.
- If I have **seventy five** 1000 pound cows consuming 2% of their bodyweight, that is 1500 pounds of feed.

WHICH COW DO YOU WANT?

Selecting heifers

The day they are born…

Bald udder/extra teats hide folds

Shape of Escutcheon pointed poll

Placement of Adrenal/Pineal

Born in the first 21 days

Malcolm Gladwell~Outliers

Approaching a year of age

1) Rump is 2.5" **or more** wider than it is long

2) Flank minus girth needs to be +2" **or more**

3) Slope from hook bones to pin bones

Developing heifers

Leave them on their mothers 10 months.

Spend a little extra on their mothers this winter to save 10-15% per year, for 10-12 years of lower maintenance replacement cows.

They really need to be bred when their brisket starts filling. (*If we are using grain to do this, we are only cheating ourselves!)*

We need heifers that have: 1) wider rumps, 2) bigger bellies and 3) more slope from hook-to-pins than their herd mates (*the commonalities of old cows*).

How to know when you know what Bonsma knew about glandular function

- Breed your replacement heifers for 21 days
- **Choose which heifers you think are best at this time**
- Of those that have their first calf unassisted next year rebreed only those for 45 day period
- Make note of those that have their second calf in the first 21 days of the calving season next year.
- **When all of your ten favorite yearling heifers are in this group**…you understand Bonsama and hormonal function

December 6-8, 2007

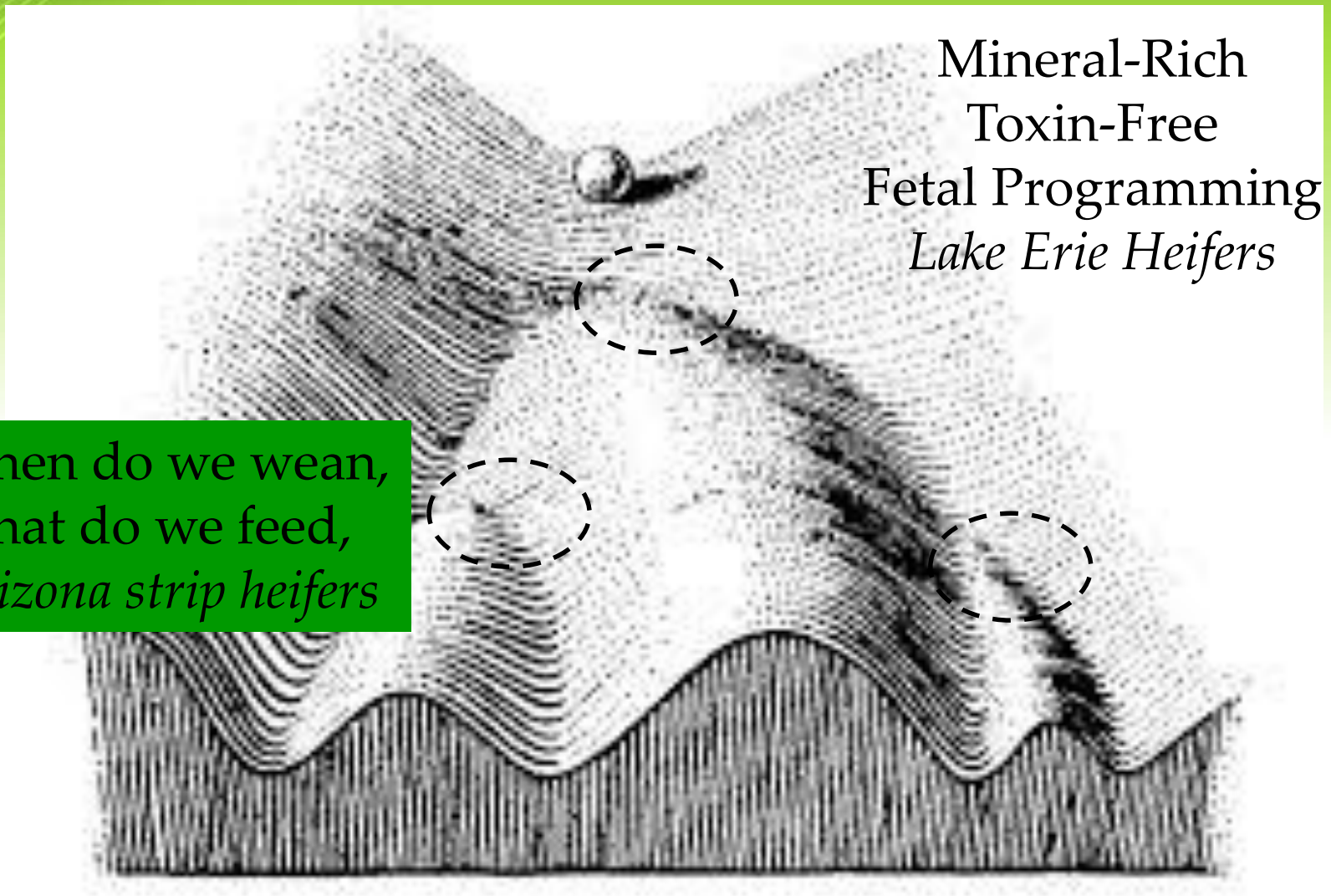
Sorted through 1400 cows using “these” methods/indicators we just discussed...

3 ½ months later the rancher sold 900/1175 of the cows that were wormed and fed hay because they did not meet the minimum standard

How often do you cull a cow that gets fat in the winter eating one bale of hay on a snow bank and brings in a healthy calf every year.

Do your cows work for you or do you work for your cows

Waddington's Epigenetic Landscape



Poor ---------- Best

The teter-totter of minerals and toxins

<u>The MINERAL problem is too LOW levels</u>

Lugol's = Iodine and Potassium Iodide

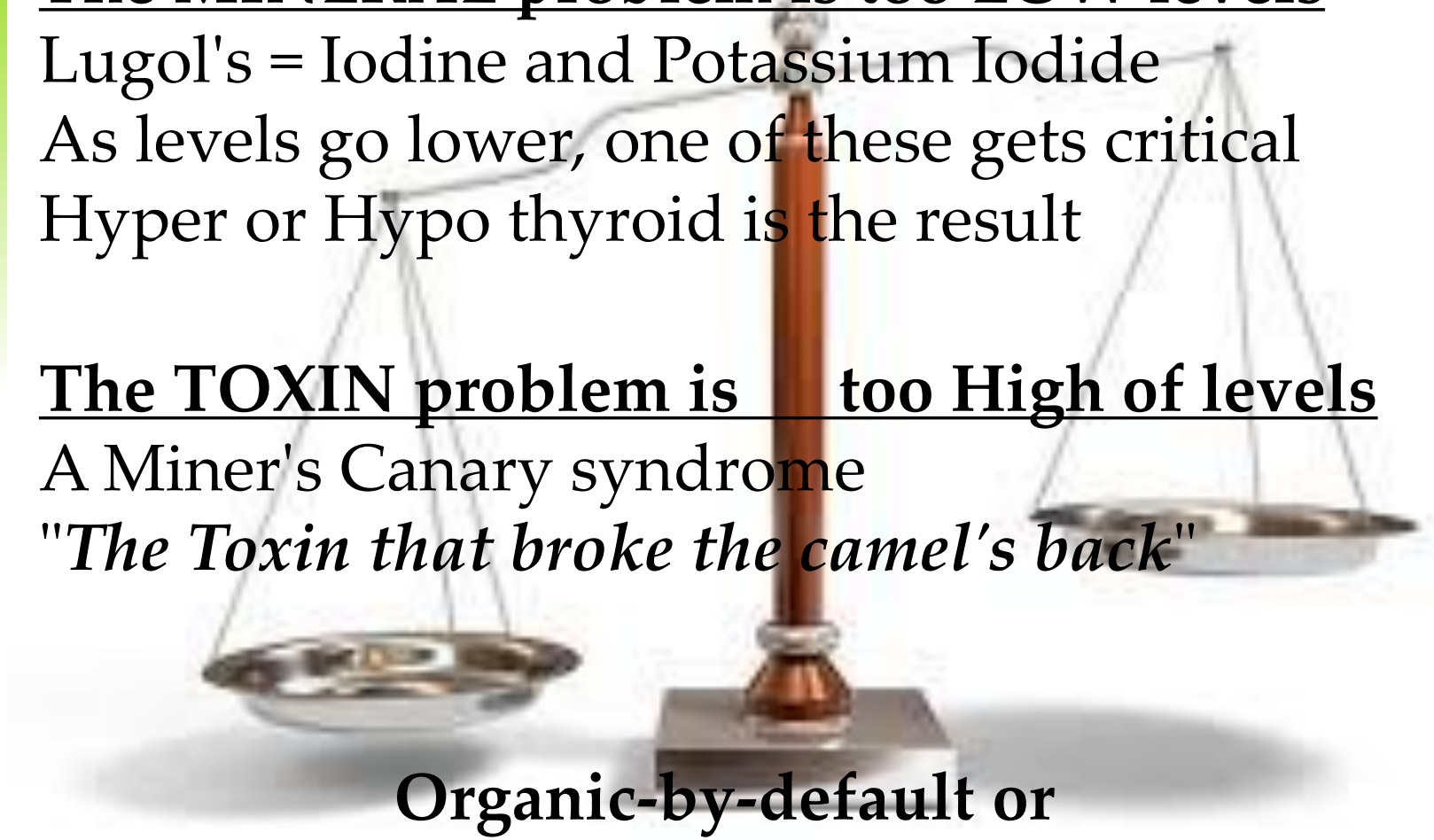
As levels go lower, one of these gets critical

Hyper or Hypo thyroid is the result

<u>The TOXIN problem is too High of levels</u>

A Miner's Canary syndrome

"***The Toxin that broke the camel's back***"



Organic-by-default or
ORGANIC-BY-DESIGN

The Mineral/Toxin Tetter-Totter

90 of the 92 minerals in sea solids can be taken up by grass.

Trace minerals act as keys which unlock the ability of the immune system to ward off invaders.

Clays Detoxing powers (50,000+ Toxins in our environment)

Short term supplements to achieve this

- **ACV** 1 ounce per 200 pounds of body weight
  - less hay in winter (20-25% less forage consumption)
  - more gain in summer (48 pounds in 60 days)
- **Brine 45% bioavailable**
  - "**The wise man's kelp**"
  - (*1 quart of sea salt/55 gallons*)
  - perfectly in natures balance
  - Kelp @ $50+/bag 90% bio
- **Detoxing Clay**

Aaron Ellison 435-633-0377

Tools to take home

YOU can learn how to select for: glandular function and butterfat , phenotypically functional cows, and properly develop the rumen of our calves

We can create the finest grass in the world, but if we only have long/tall genetics w/o butterfat and rumen development, we won't be THE most efficient at harvesting that grass.

This is all learn-able WILL YOU INVEST THE TIME?

"Know what you know.

Know what you don't know.

Know who knows what you don't know"

Tailor Made Cattle:

"Helping solve your Genetic and Epi-Genetic challenges"

Steve Campbell

Cell: 208-315-4726

Email: trianglec3@gmail.com

Web: tailormadecattle.com

HAVE GUN WILL TRAVEL

WIRE PALADIN

SAN FRANCISCO