

NDSU

DICKINSON
RESEARCH EXTENSION CENTER

A Discussion Where We Have Been Where We Are Where We Are Going



Kris Ringwall, Ph. D., Extension Livestock Specialist
Douglas Landblom, Animal Scientist
Dickinson Research Extension Center



“I Thought I Was Doing Better Than That!”



BEEFTALK 788

Tracking Cattle Expenses

Use these six areas to help you:

1. Genetics
2. Reproduction
3. Nutrition
4. Herd Health
5. Marketing
6. Waste Management

<https://www.ag.ndsu.edu/news/columns/beeftalk/beeftalk-i-thought-i-was-doing-better-than-that/>

“After The Party Blues”

BEEFTALK 749

Dad, I Am Out of Money!

Unfortunately, one of the most difficult lessons in life is the lesson of living within one's means.



<https://www.ag.ndsu.edu/news/columns/beef-talk/beef-talk-after-the-party-blues/>

“Grandma and Grandpa Are Worried”

BEEFTALK 783

Changes in North Dakota Beef Cattle Operations

	2000	2013	% Change in 10 years	2014	% Change in 11 years
Gross margin	\$466	\$830	up 178%	\$1,310	up 281%
Cost of purchasing or keeping replacement females	\$132	\$268	up 203%	\$297	up 225%
Cost of total direct and overhead expenses	\$342	\$583	up 170%	\$648	up 189%

FINBIN (www.finbin.umn.edu/) from the Center for Farm Financial Management,
University of Minnesota

<https://www.ag.ndsu.edu/news/columns/beeftalk/beeftalk-grandma-and-grandpa-are-worried/>

“Cost of Beef Production Up 200 Percent”

BEEFTALK 784

N.D. Beef Cattle Operation Costs Jump

	2000	2013	% Change in 10 years	2014	% Change in 11 years
Total direct and overhead expenses	\$342	\$564	up 165%	\$648	up 189%
Actual weaning weight	544	541	down .6%	547	up .6%
Pounds weaned per exposed cow	492	479	down 2.6%	471	down 4.3%
Cost per pound weaned per exposed cow	\$.69	\$1.18	up 171%	\$1.38	up 200%

FINBIN (www.finbin.umn.edu/) from the Center for Farm Financial Management, University of Minnesota

<https://www.ag.ndsu.edu/news/columns/beeftalk/beeftalk-cost-of-beef-production-up-200-percent/>

“Can Production Efficiency Offset Costs?”



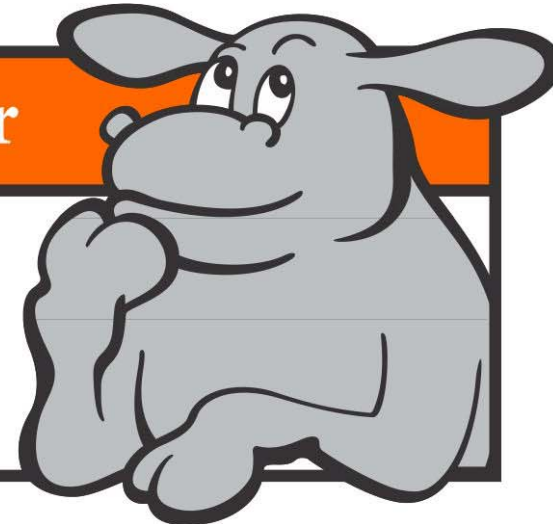
<https://www.ag.ndsu.edu/news/columns/beef-talk/beef-talk-cost-of-beef-production-up-200-percent/>

“Pondering Growth in the Beef Business”

BEEFTALK 786

A Thought to Ponder

“Can commercial producers
afford to sell
7-month-old calves?”



<https://www.ag.ndsu.edu/news/columns/beeftalk/beeftalk-pondering-growth-in-the-beef-business/>

“Can Commercial Producers Afford To Sell 7-month Old Calves?”

BEEFTALK 787

**More Pondering
Cow-calf Producer Points**



How to make a \$600 gross margin
work with \$650 expenses

<https://www.ag.ndsu.edu/news/columns/beef/beeftalk/beef-talk-can-commercial-producers-afford-to-sell-7-month-old-calves/>

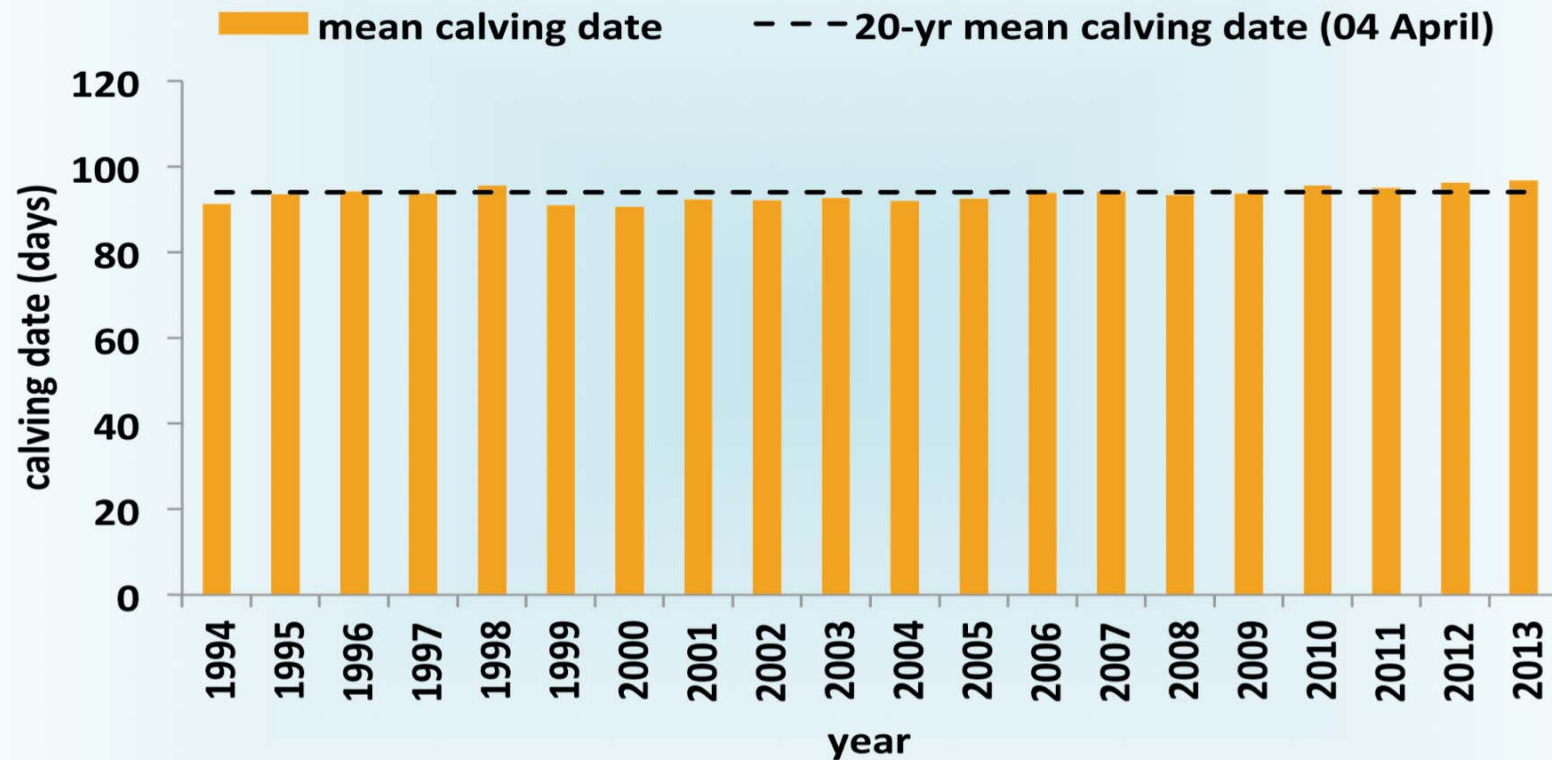
We Know What Has Worked



20-year Average Calving Date



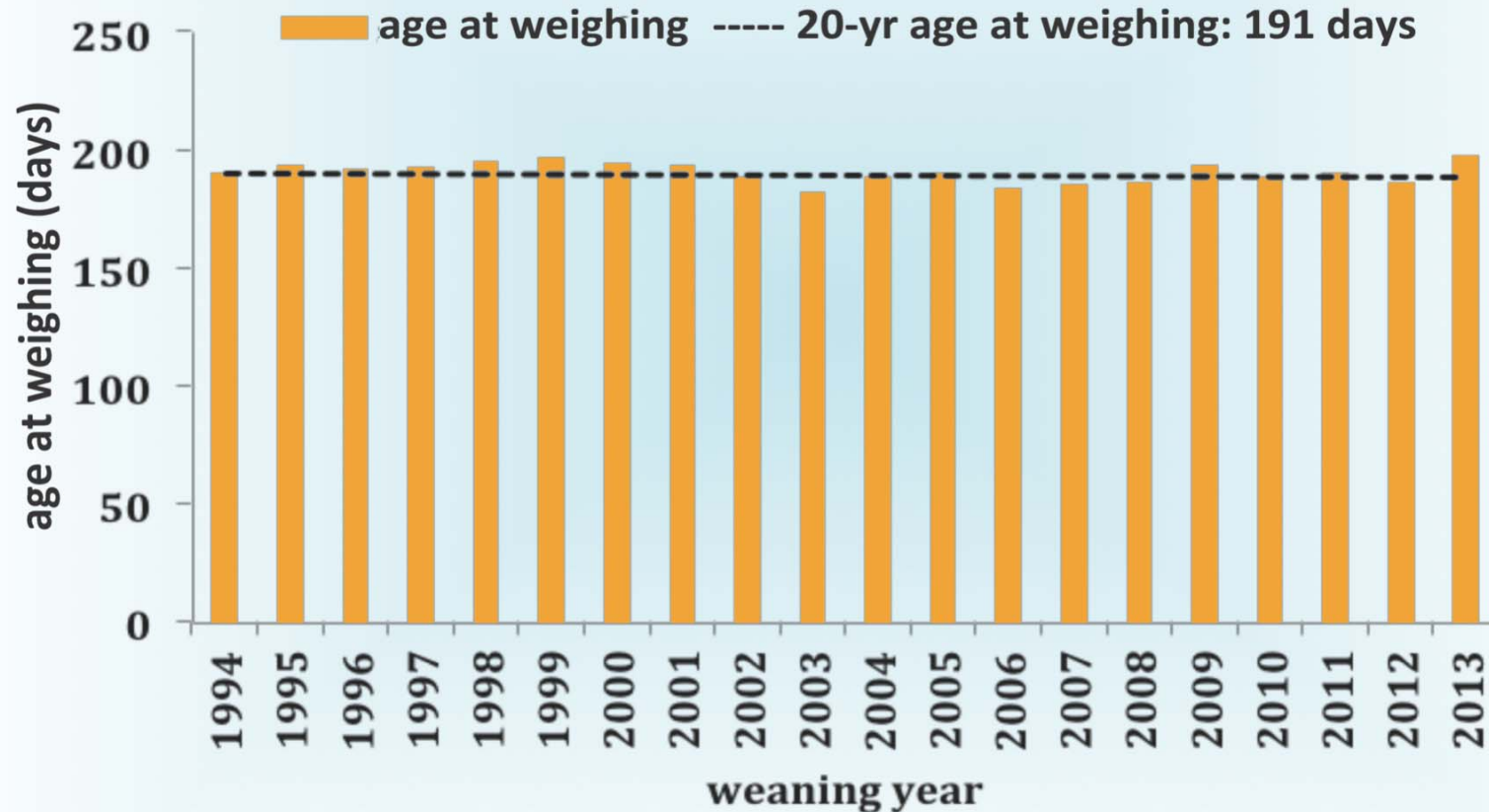
CHAPS20Y: mean calving date over time (years)



20-year Average Weigh Age



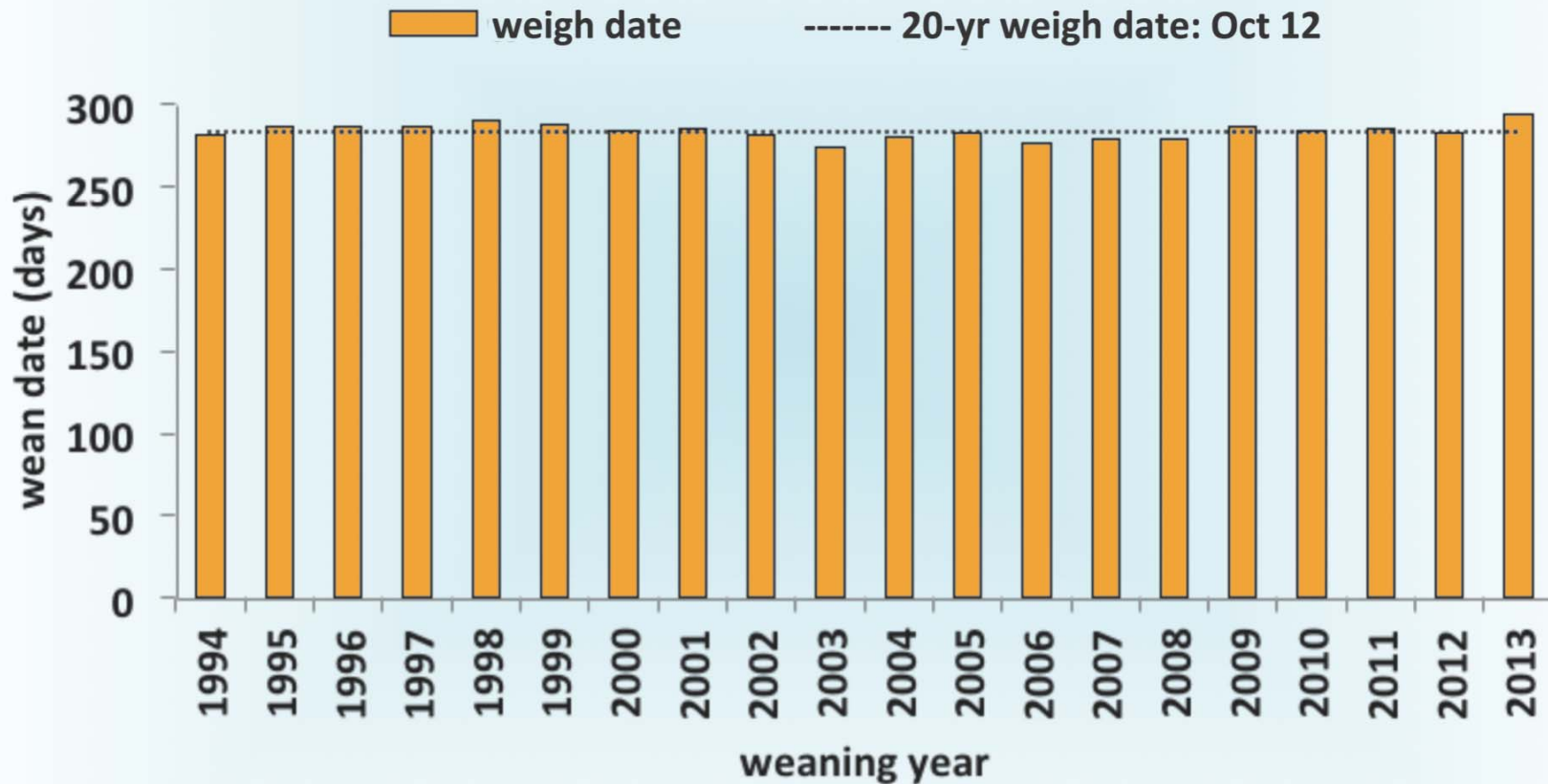
CHAPS20Y: mean age at weighing over time with 20-yr trends



20-year Average Weigh Date



CHAPS20Y: mean weigh date over time with 20-yr trends





Benchmarks



Animal Performance

www.chaps2000.com/benchmarks.htm as of March 29, 2015	
Average Age at Weaning	191
Steers WWT	571
Heifers WWT	542
Bulls WWT	595
Average WWt	558
Lbs Weaned/Cow Exposed	495



Benchmarks



Animal Performance

www.chaps2000.com/benchmarks.htm as of March 29, 2015	
Average Daily Gain	2.49
Weight Per Day of Age	2.95
Birth Weight	84
Adjusted 205 Day Weight	623
Frame Score	5.6



Benchmarks



Reproductive Efficiency

www.chaps2000.com/benchmarks.htm as of March 29, 2015

% Pregnancy	93.1
% Pregnancy Loss	0.65
% Calving	92.5
% Calf Death Loss	3.4
% Weaning	89.8
% Replacement Rate	15.7



Benchmarks



Reproductive Efficiency

www.chaps2000.com/benchmarks.htm as of March 29, 2015	
% Cows Calving at 42 Days	86.4
Cow Age	5.5
Cow Weight	1418
Cow Body Condition Score	5.9



This Is Beef Production!

- Keep calves healthy
- Work the cows
- Wean the calves
- Fit cattle to nutritional needs

We Know What Has Worked

The Northern Plains nutritional curve fits
March-April calving

- Access to Crested Wheatgrass
- Cows milk well
- March-April calves can utilize grass
- Sell hefty, healthy, heavy calves

This is not a discussion about cow size.

So What?

Attitudes!

**Traditional goals of beef managers are
changing.**

Nontraditional focus changes the paradigm.

Why look at something different?

May-June calving presents opportunities

❖ Decreased labor need

❖ Reduced facilities

❖ Matching feed to 3rd trimester needs

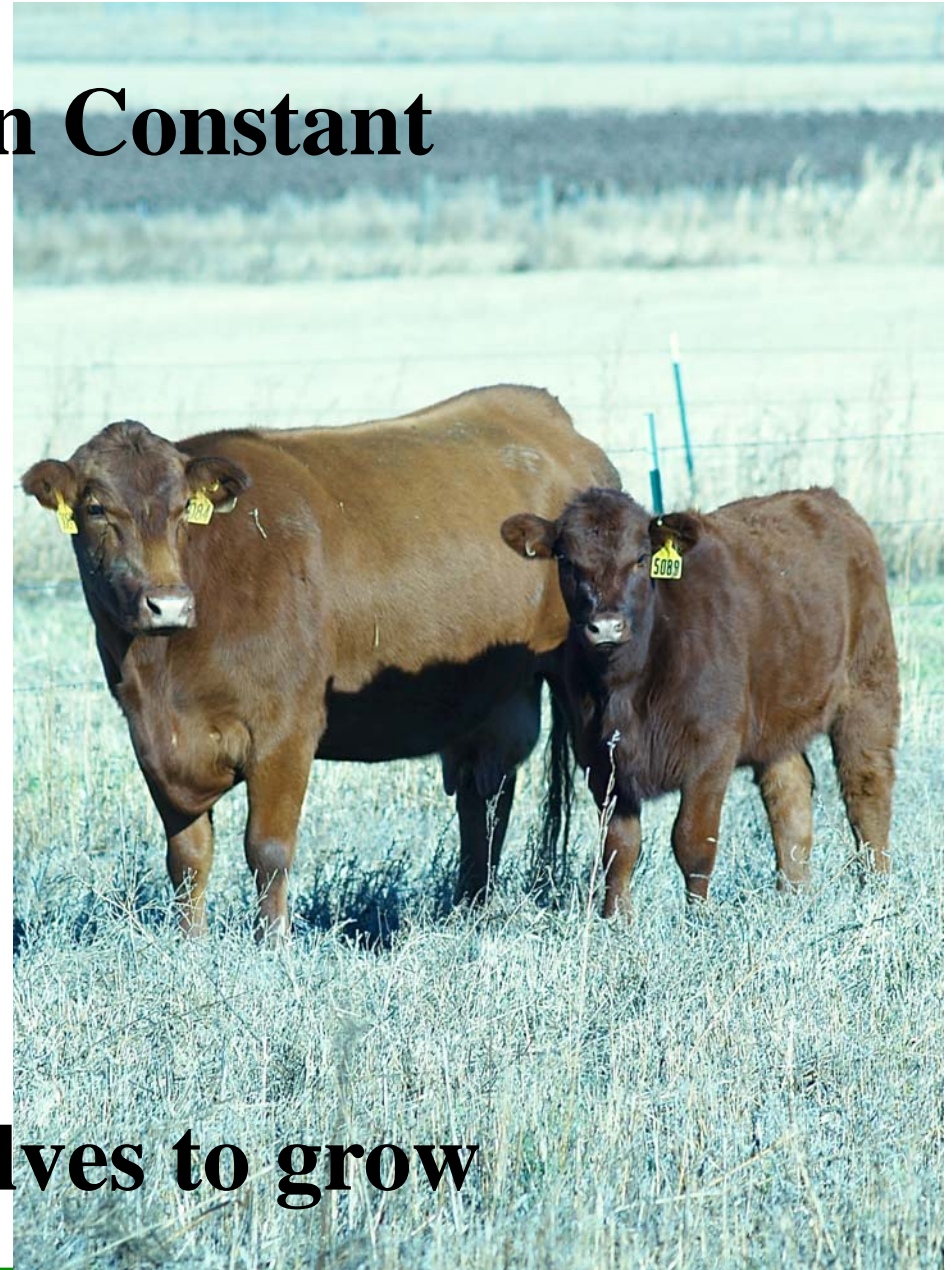
❖ Potential to capture profit

Things That Remain Constant



Nutritional requirements of cows

Things That Remain Constant



Need for calves to grow

Things That Remain Constant

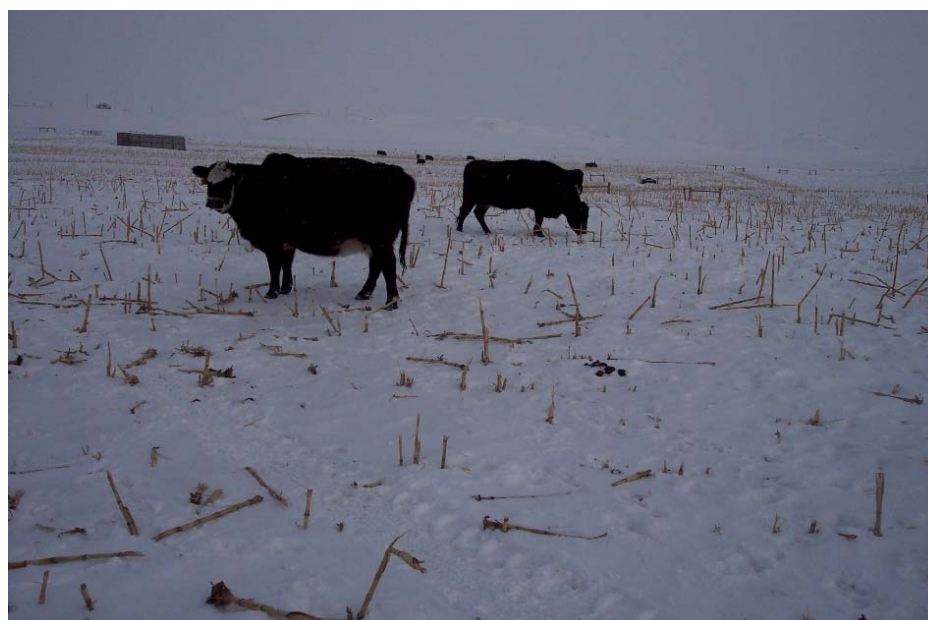


Every operation needs good genetics

Cows Can Extend the Grazing Season



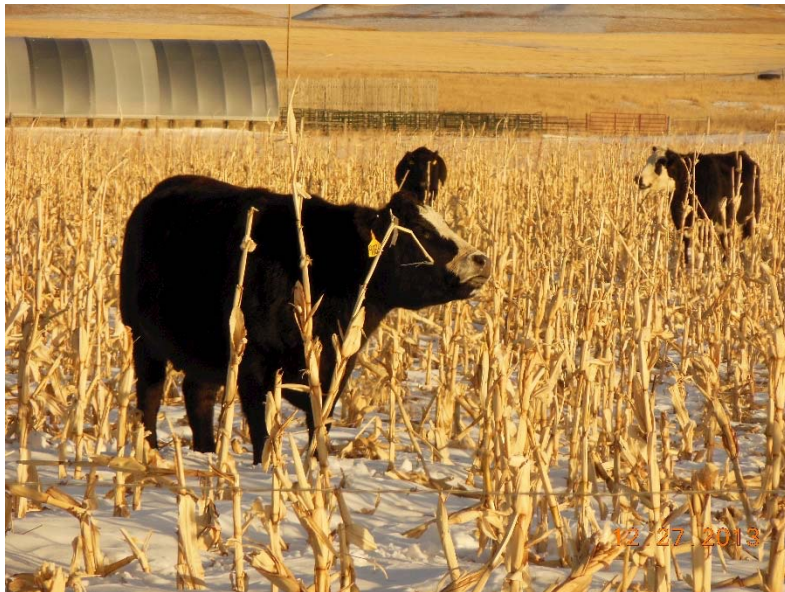
Grazing stockpiled mixed pastures of bromegrass and crested wheatgrass followed by corn stalk residue

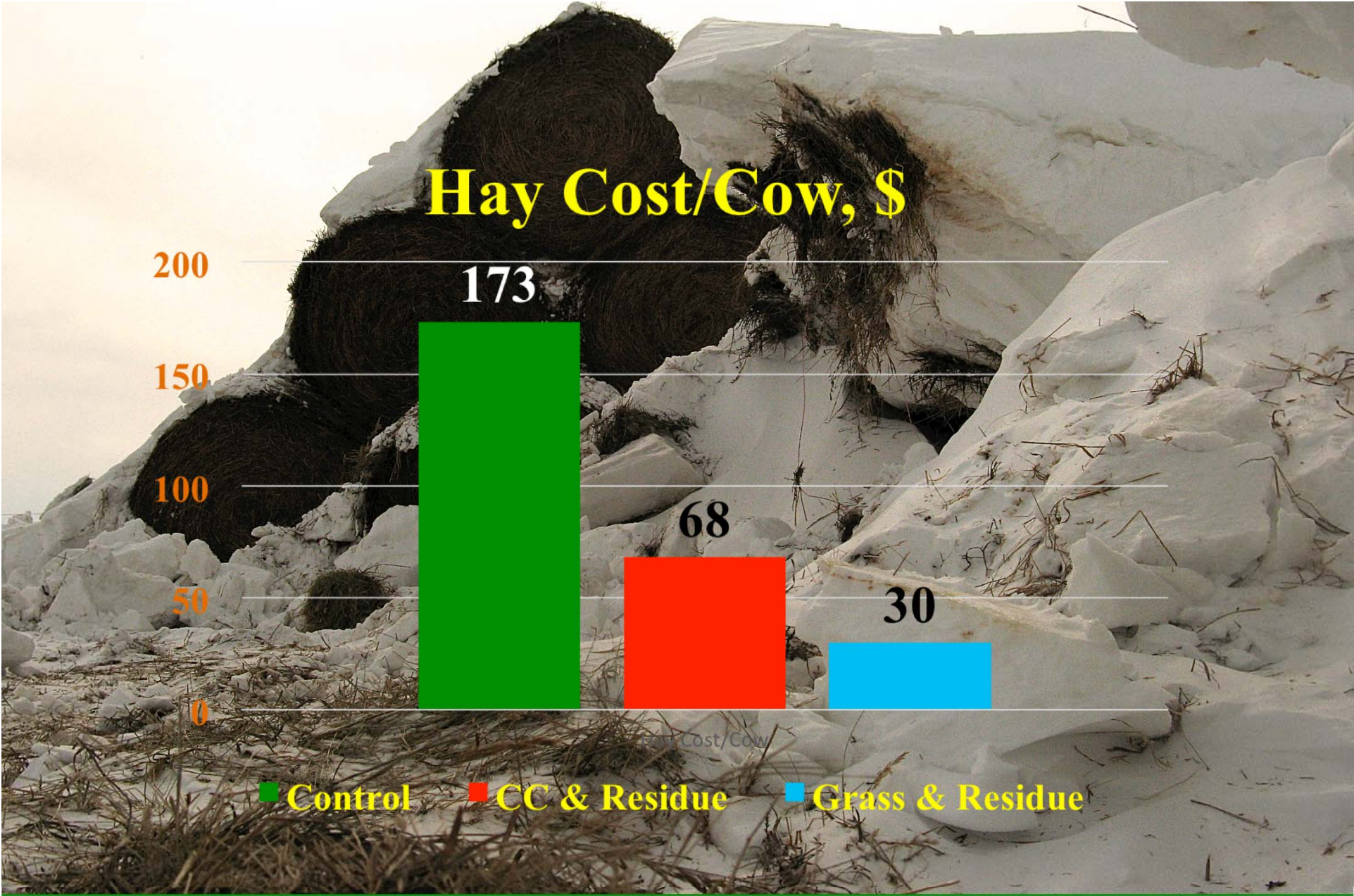


Cows Can Extend the Grazing Season

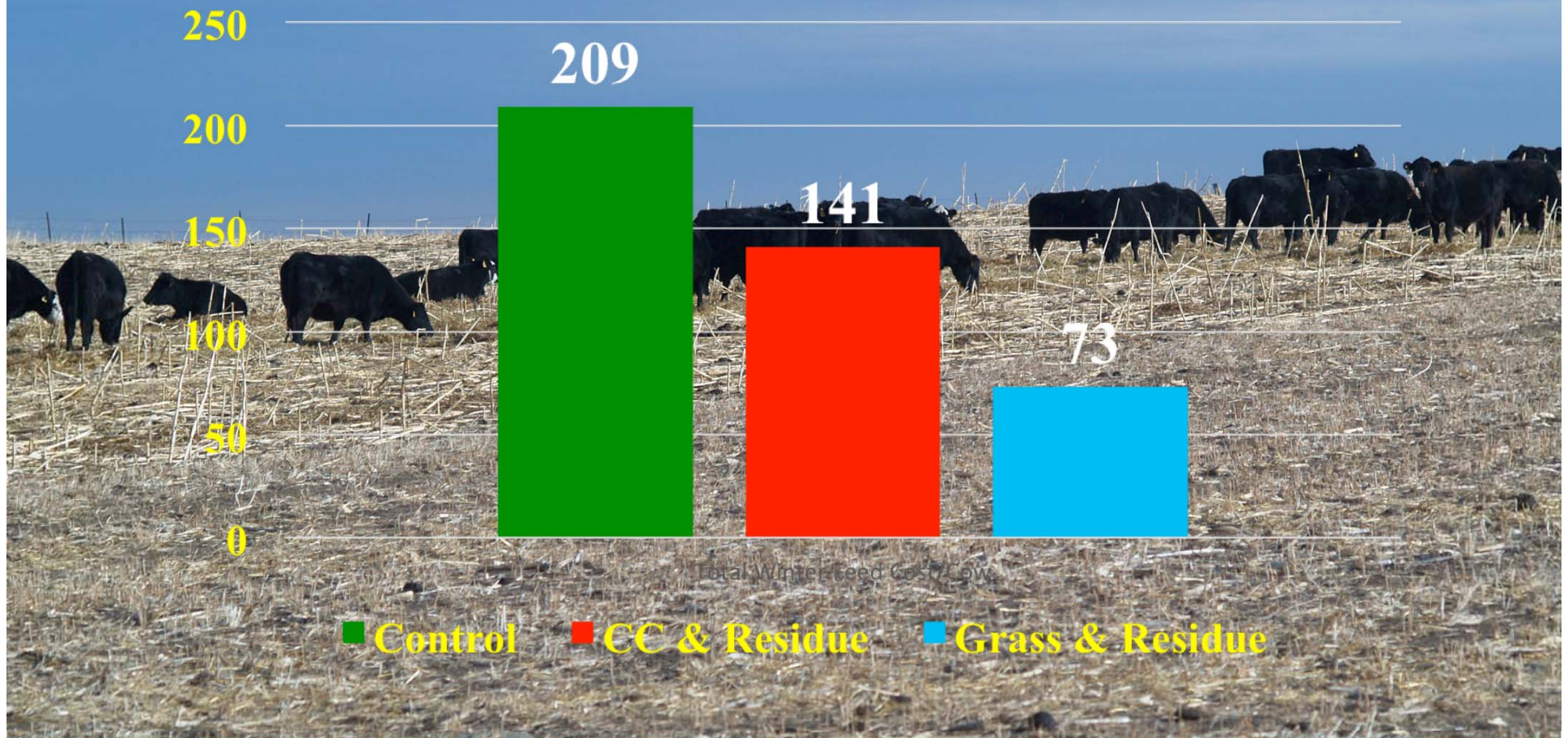


**By Utilizing
Cover Crops
Crop Residue**





Total Winter Feed Cost/Cow





March-April vs May-June

Dickinson Research Extension Center Ranch Headquarters, Manning, ND



March-April Calving Data

2009-2011

May-June Calving Data

2012-2014

Herd H38 Management



	Mar-Apr	May-June
Bull Turnout	1-Jun	1-Aug
Official Start of Calving*	15-Mar	7-May
Average Calving Date	29-Mar	25-May
Start of Third Trimester	12-Dec	12-Feb
* = Average date when 3 rd cow in herd calves		

Average Calving Date Statistics



CHAPS (20 year average)	April 4
Herd 38 (DREC, March-April Calving)	March 29
Herd 38 (DREC, May-June Calving)	May 25

Dickinson Research Extension Center Ranch Headquarters, Manning, ND



March-April Calving Data

2009-2011

May-June Calving Data

2012-2014

Herd H38

Animal Performance



Critical Success Factors	Mar-Apr 2009-2011	May-June 2012-2014
Average Age at Weaning	205	168
Steers	609	537
Heifers	587	487
Bulls	NA	NA
Average Weaning Weight	598	514

Herd H38

Animal Performance



Critical Success Factors		
	Mar-Apr 2009-2011	May-June 2012-2014
Average Daily Gain	2.51	2.52
Weight Per Day of Age	2.94	3.06
Birth Weight	86	89
Adjusted 205 Day Weight	640	639
Frame Score	5.0	5.0

Herd H38

Reproductive Efficiency



Critical Success Factors		
	Mar-Apr 2009-2011	May-June 2012-2014
% Cows Calving in 42 Days	95.2	95.2
Cow Age	4.8	5.0
Cow Weight	1307	1437
Cow Condition	5.6	5.3

Herd H38

Reproductive Efficiency



Critical Success Factors	Mar-Apr 2009-2011	May-June 2012-2014
% Pregnancy	98.96	98.23
% Pregnancy Loss	0.50	0.85
% of Cow Calving	98.46	97.38
% Calf Death loss	6.50	3.72
% Cows Weaning Calves	91.96	93.66

Average Daily Gain

March-April Calves = 2.50
May-June Calves = 2.50



Calf Growth

(Early November weaning; no birthweight included)

March-April Calves (205 days @ 2.50) = 512.5

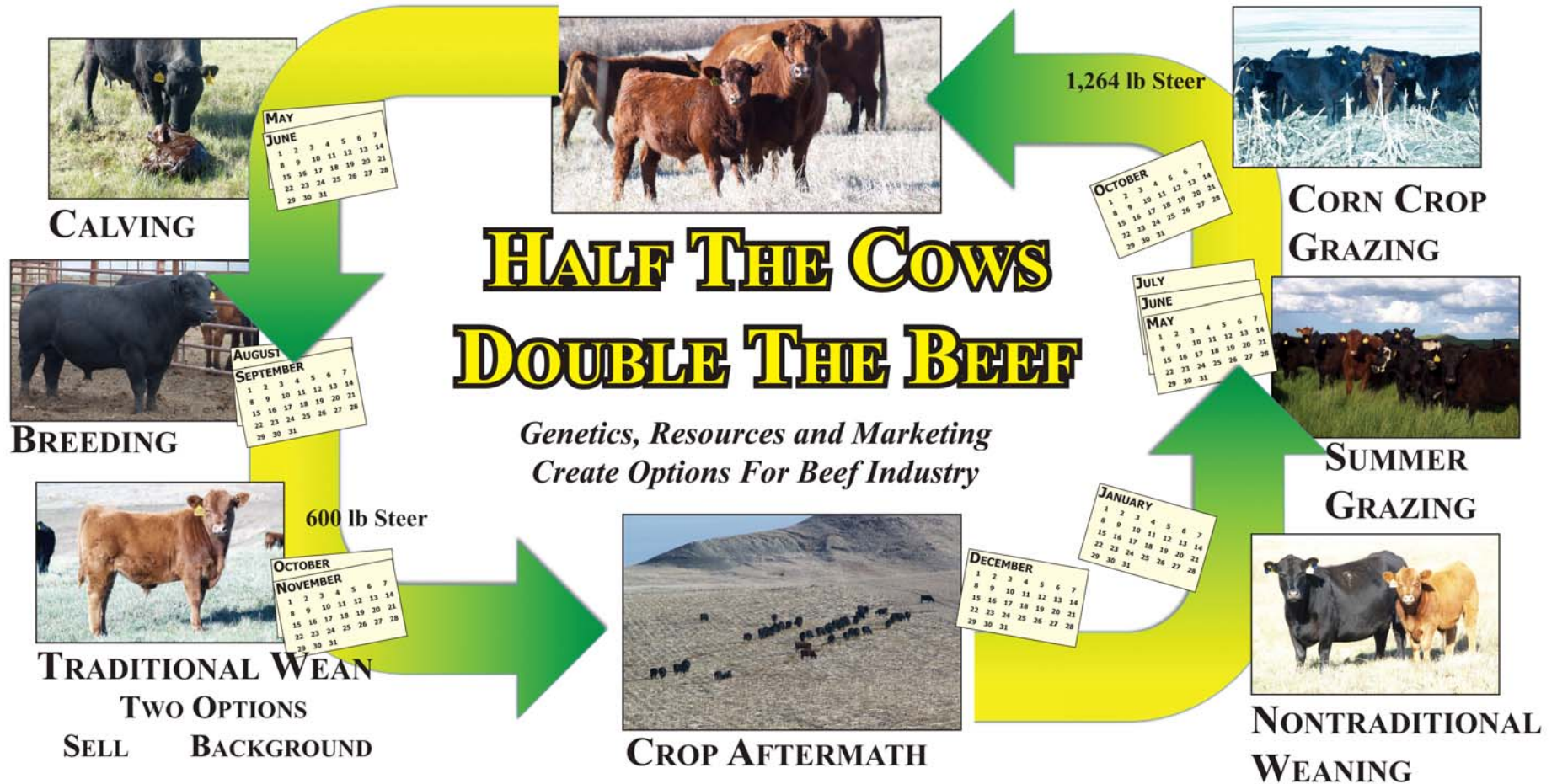
May-June Calves (168 days @ 2.50) = 420.0

The BIG Question:



**HOW DO WE MAKE UP FOR
92.5 POUNDS OF LOST GAIN?**

BEEF STREAM





The Next Step:

JANUARY WEANING

2015 Calves Weaning Plan

Mid to late October

Work Calves, Cows

Precondition (calves)

Weigh (calves and cows)

Condition score (calves and cows)

Pregnancy check (cows)



Mid December

Wean Calves

From 2 and 3 year old cows

Mid January

Wean Calves

From mature cows

January 2015 Beef Cows At Weaning

Fall Weight	Winter Weight	Weight Loss
1473	1400	-.92 lbs/day
Fall BCS	Winter BCS	
5.3	4.6	

January 2015 Beef Calves At Weaning

Fall Weight	Winter Weight	Weight Gain
534	609	+1.19 lbs/day

Management Goals

Winter calves for three-plus months

Weight gain goal of 1 to 1.5 lbs/day

Diet is primarily forage based

Turn yearlings onto Crested Wheatgrass May 1

Target is breed yearling heifers in August

The Next BIG Question



**HOW DOES BACKGROUNDING GAIN
COMPARE WITH JANUARY WEANING?**

A sunset over a field with farm equipment and tents.

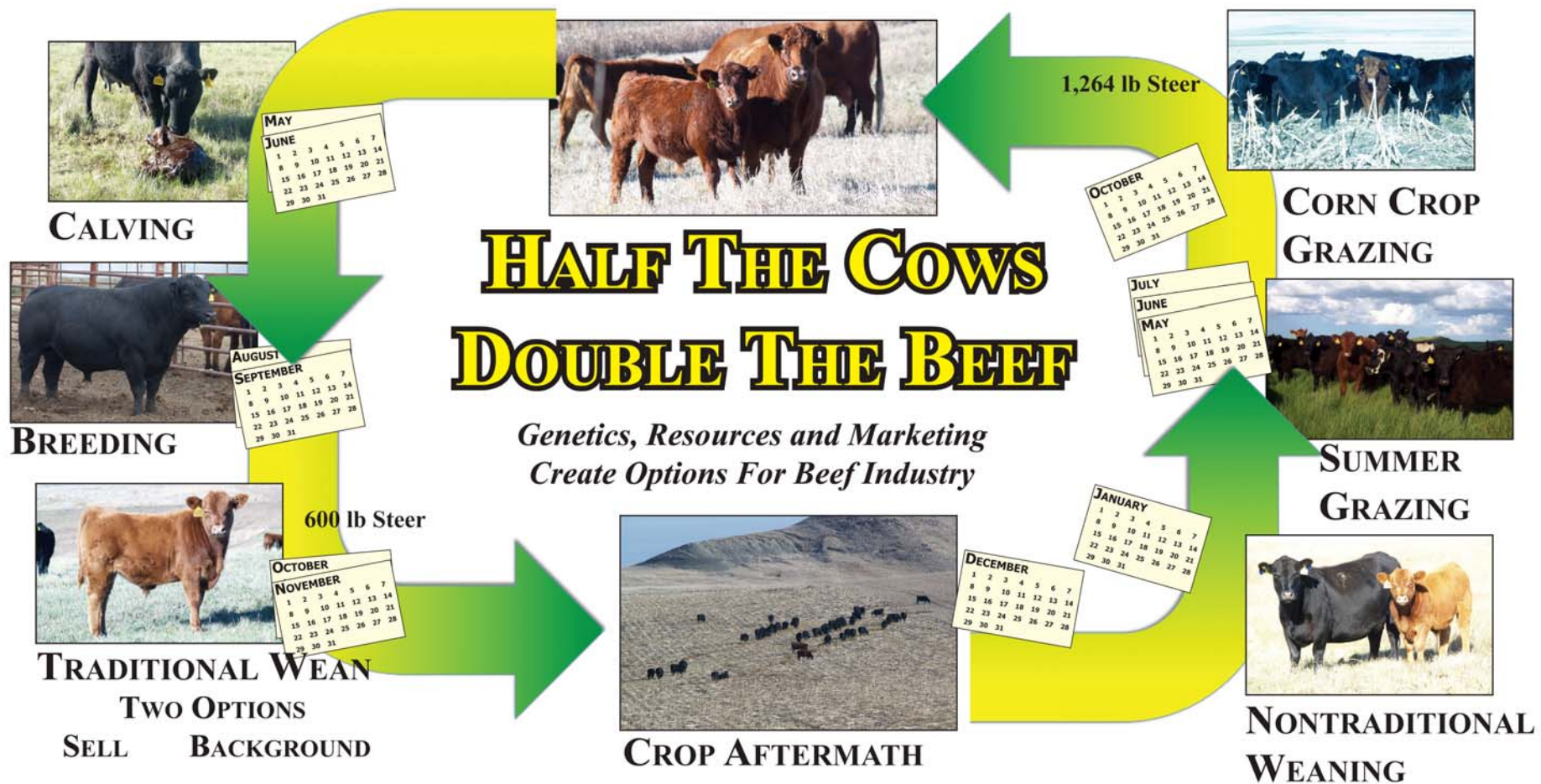
This Is Beef Production!

**YOU GET TO DECIDE TO DO
SOMETHING DIFFERENT!**

YOU CHANGE THE GAME PLAN!

A NEW PARADIGM EXISTS!

BEEF STREAM



This Is Beef Production!

You cannot control the markets

You can react to opportunities



EXPLORE SOME OPTIONS:



What Are Our Options?

- Sell Younger Calves**
- Begin Backgrounding in January**
- Keep Calves for Yearling Operation**
 - **Use May Crested Wheatgrass**
 - **Utilize Cover Crops**
 - ✓ **Supplement Weight Gain**
 - ✓ **Build Soil Quality**
 - **Capture Additional Revenue**

What Are Our Options?



Sell Younger Calves

How do we make up the the 92.5 pound difference?

What Are Our Options?

Wean calves in January

On crop residue.

Overwinter calves with 1-1.5 lb/day gain

Cows begin third trimester in February

What Are Our Options?

Keep Calves for Yearling Operation

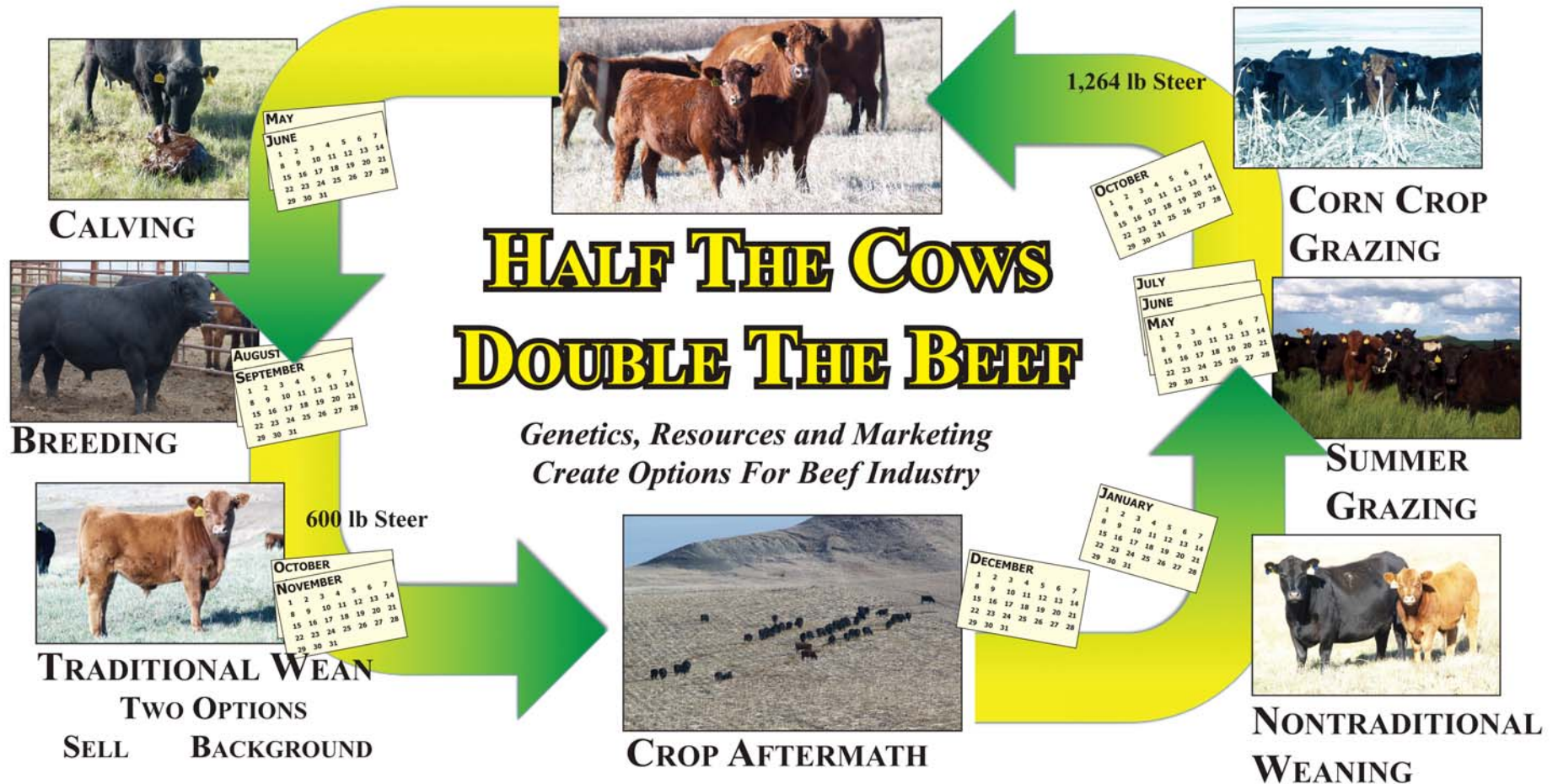
- Use May Crested Wheatgrass
- Utilize Cover Crops

Earn Supplemental Weight Gain

Build Soil Quality

Capture Additional Revenue

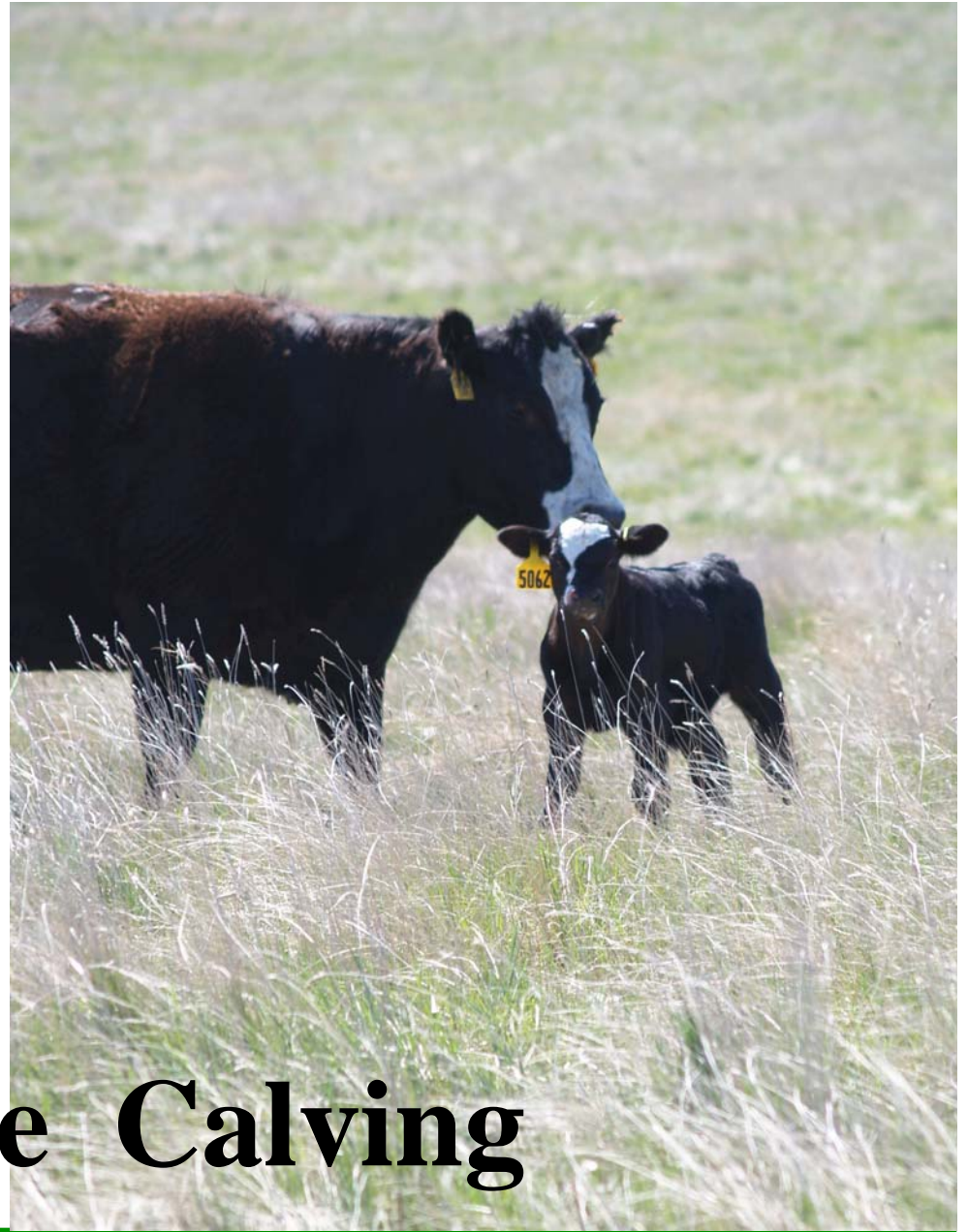
BEEF STREAM





WEATHER IS ALWAYS A CONCERN!

Can be cold in March-April
Spring snowstorms in May-June
Cold, snowy weather in November



May-June Calving

May-June Calving



We pulled off 665-pound calves from May calving. They were not that much lighter than our February calves we weaned in mid-October . . . and they all have their ears and tails.

Garry Ottmar, DREC Ranch Manager

May-June Calving



Those early born calves can get their feet froze a little (and) once those calves go to the feedlot they do not do well . . . If the calf gets in trouble, the calf will be fine with (May-June) temperatures. In the winter, if you are not there right away, the calf is gone.

**Garry Ottmar
DREC Ranch Manager**

May-June Calving



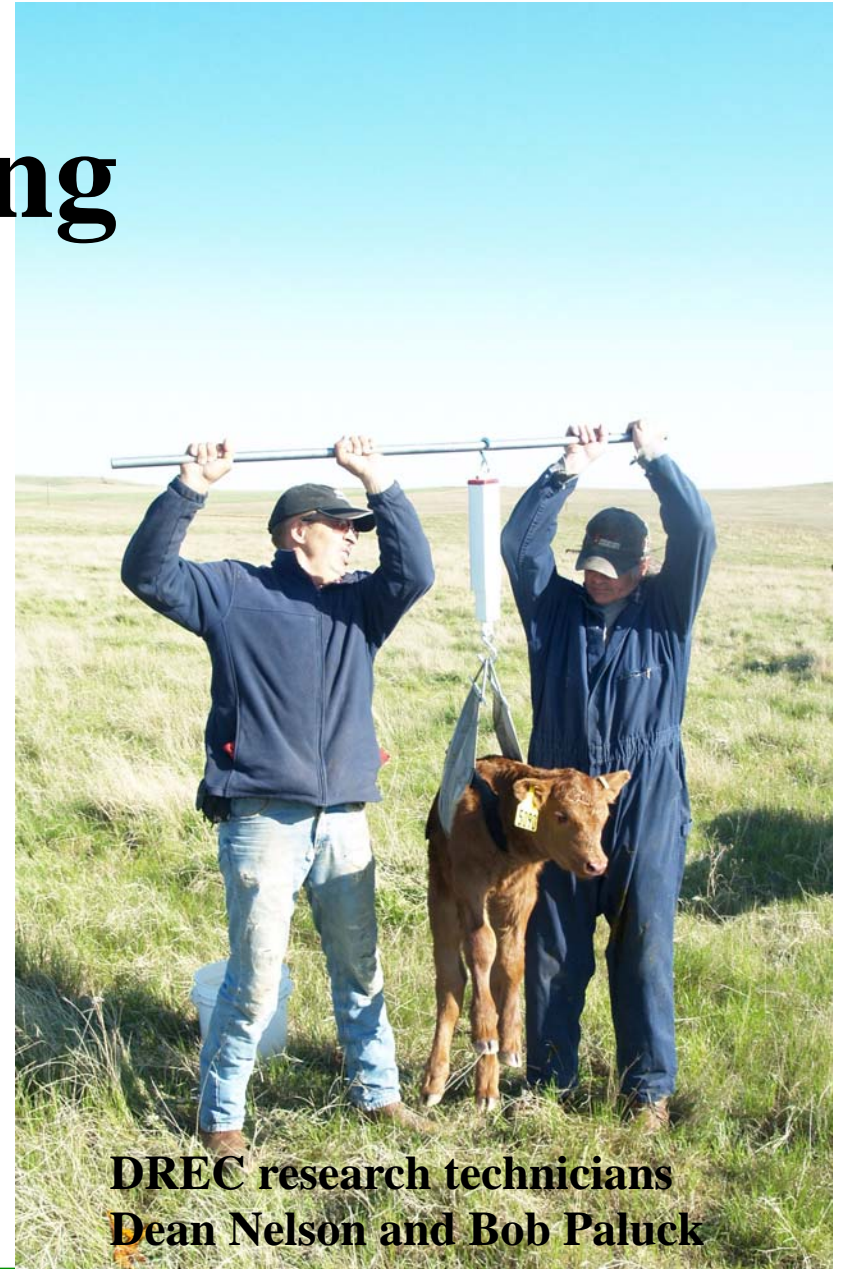
I would never go back to February and March calving. This is a good option (for) husband and wife teams that are so prevalent out there (on the farm or ranch). I don't know a better way to do it.

**Garry Ottmar, DREC
Ranch Manager, and
wife Wanda.**

May-June Calving

*I love it (May-June calving).
The (warmer) weather seems to
quiet the cows down, the cows
are more healthy, there is less
disease . . . I would never want
to go back. It's just Dean and
I . . .*

Bob Paluck
DREC Research Technician



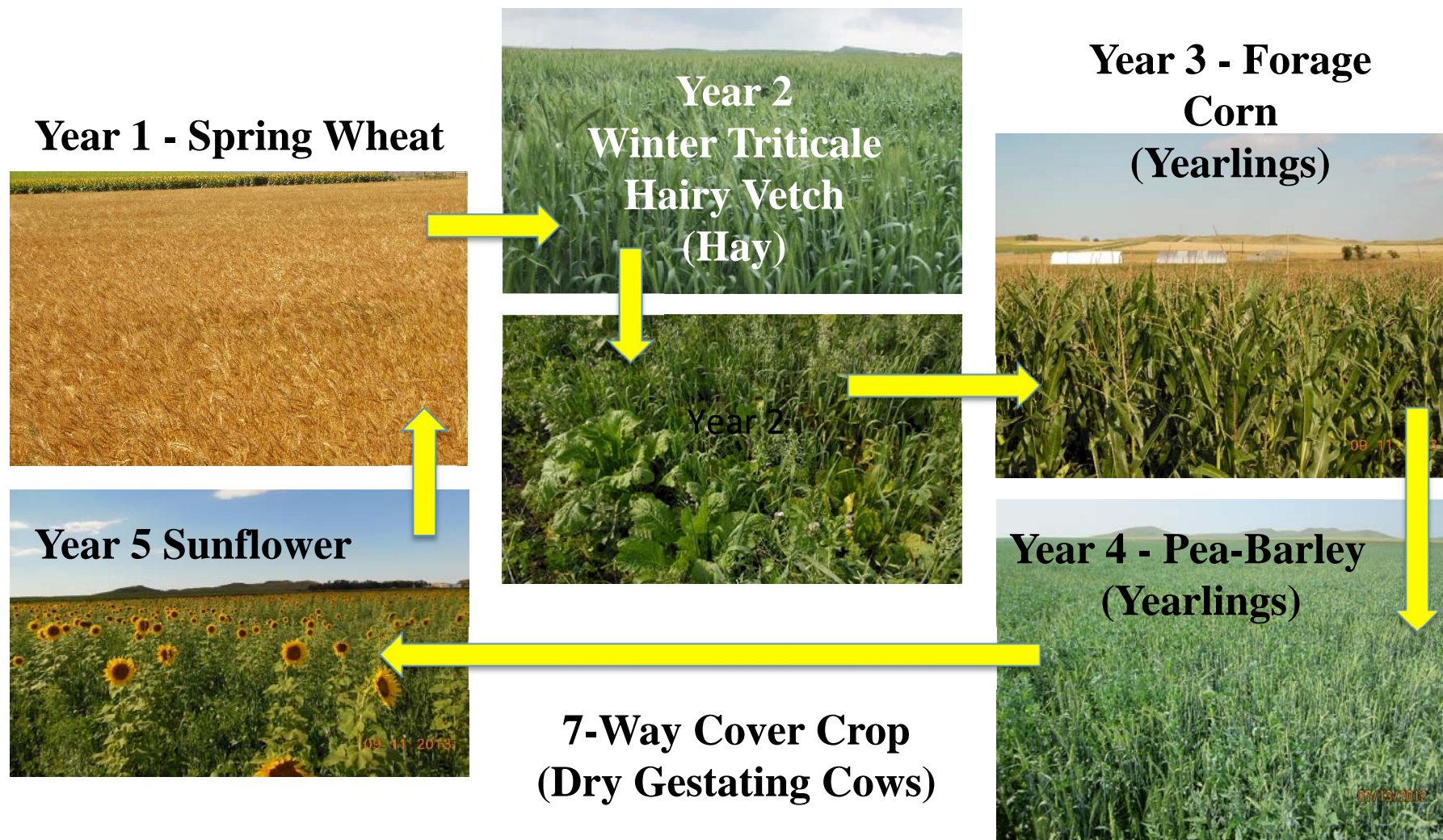
**DREC research technicians
Dean Nelson and Bob Paluck**

2014 May Wean Data

Herd	Wean Age (days)	Wean WT
DREC Herd 38	164	540
CHAPS Avg	191	558

May born calves grow and are marketable using traditional management systems.

Graze to Slaughter Crop Rotation



Grazing Sequence Perennial Pastures

- **Early May**
Crested Wheatgrass
(39 Days)



- **Mid-June**
Native Range
(61 Days)

Grazing Sequence (Annual Forage)

- Mid-August (27 Days)
Pea-barley
Protein bridge



Mid-September
Unharvested corn
(55-77 Days)

Graze to Slaughter Forage Sequence



1,264 pound steer



2014 May Wean Data

Pounds weaned per cow exposed

Herd

DREC Herd 38

CHAPS Avg

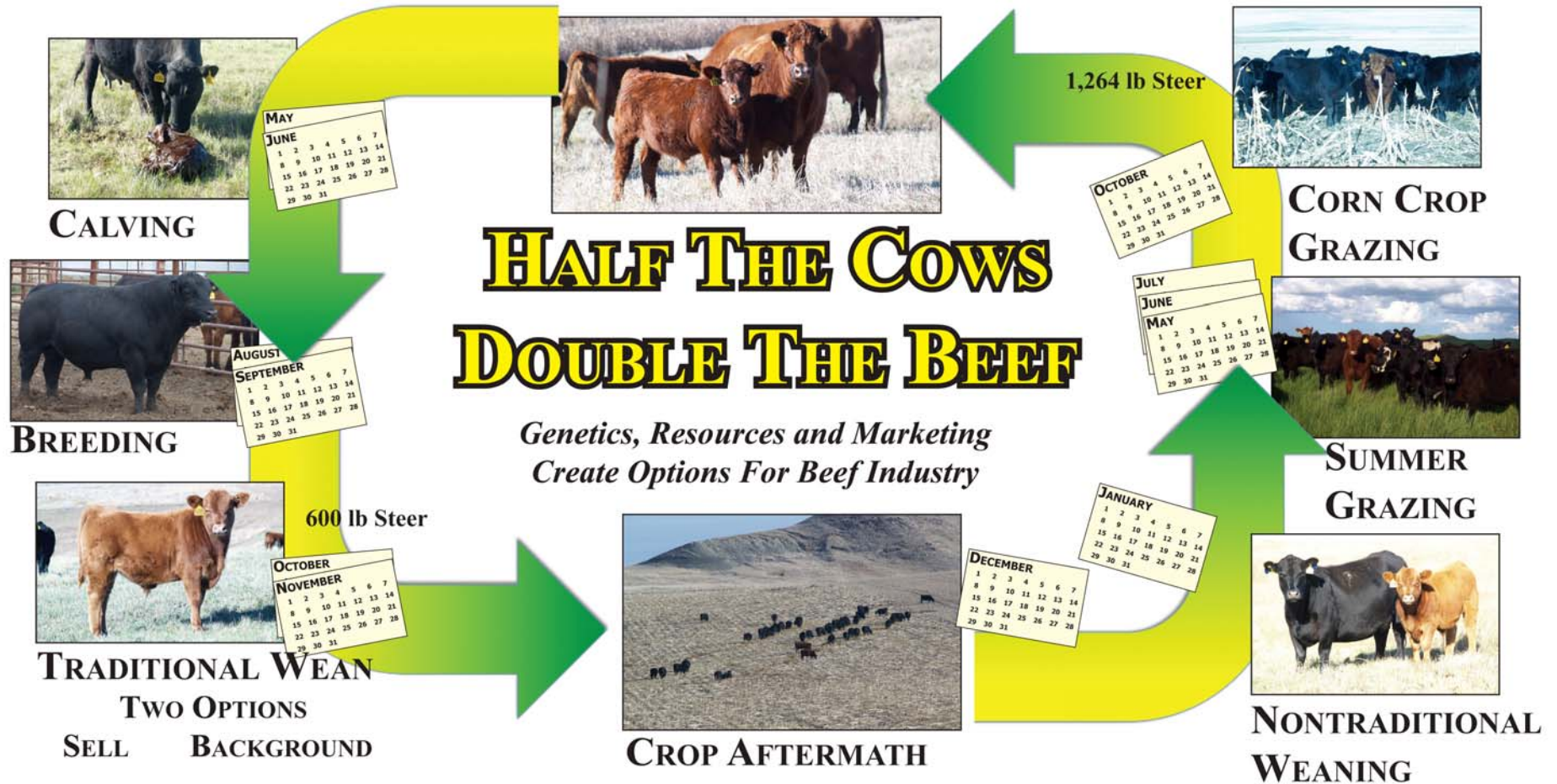
Lbs weaned/cow exposed

524

495

May born calves grow.

BEEF STREAM





Sell Half The Cows

**Market the Same
Amount of Beef**

Marketing Options

Traditional steers:

sell in November at 609 pounds

Nontraditional steers:

sell long yearlings at 1,264 pounds

That's What It's All About!



Come and See for Yourself!



There Are Opportunities In The Beef Business!

THANK YOU FOR YOUR ATTENTION

701-483-1100

kris.ringwall@ndsu.edu -- douglas.landblom@ndsu.edu

www.ag.ndsu.edu/DickinsonREC