

# When should I calve?

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**NDSU**

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# Calving date

- Calve when you have or others do
- Calve based on economics and resources
- Calve when you can and what will work

# Calving Seasons

- Winter- Early Spring Calving (Jan-Mar)
  - Predominant amongst breeders
- Late Spring-Early Summer Calving (Apr-Jun)
  - Trend for large operations
- Fall Calving (Aug-Oct)
  - Niche under right resources

# Big Decision – Affects Everything

- Weight and value of calves
- Calf health/survival
- Labor need and availability of labor
- Facilities and equipment
- Wintering feeds and rations
- Herd reproduction
- Profitability
- Easily move latter but not vice versa

# NDSU

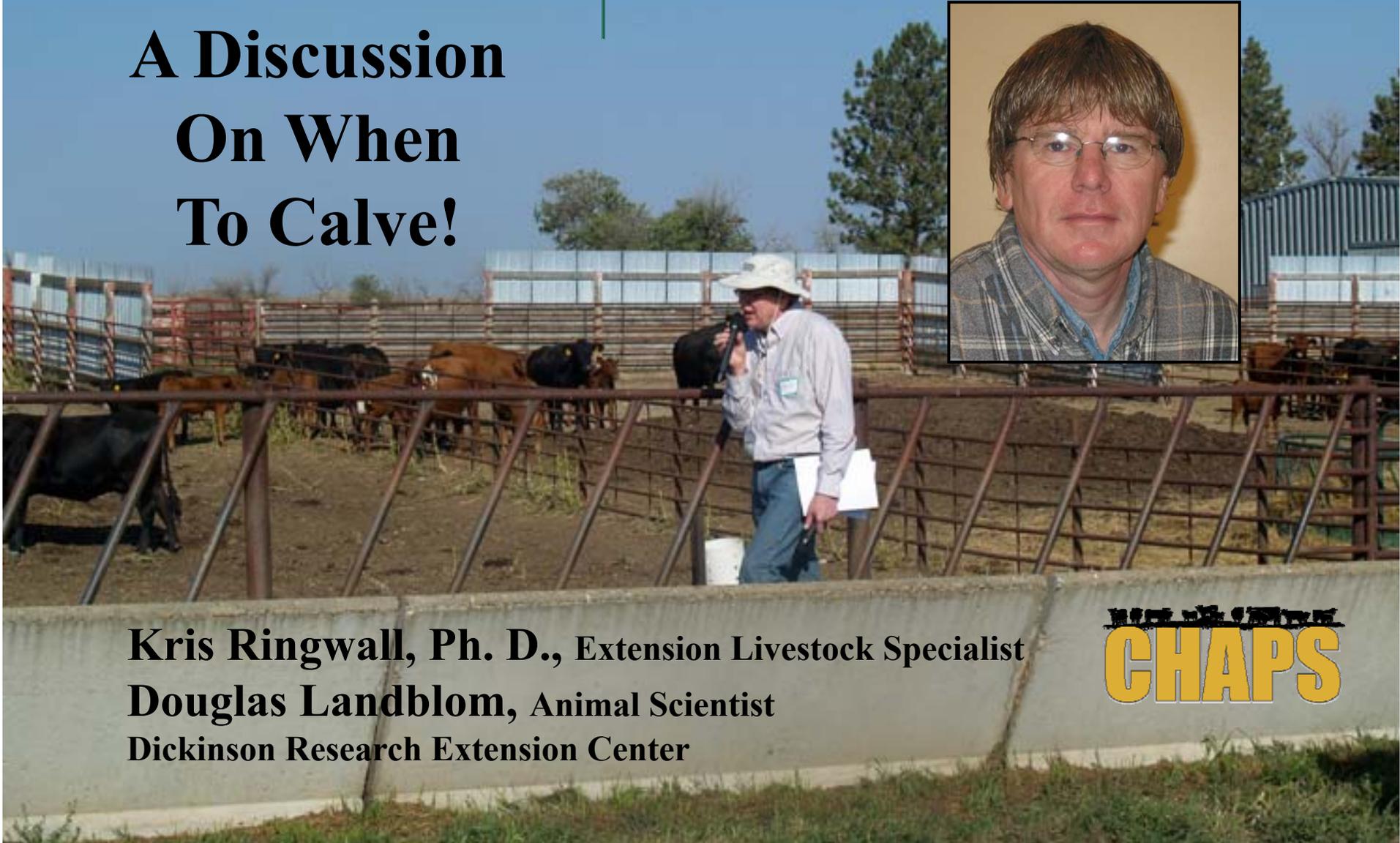
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## A Discussion On When To Calve!



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

**CHAPS**





# March-April vs May-June

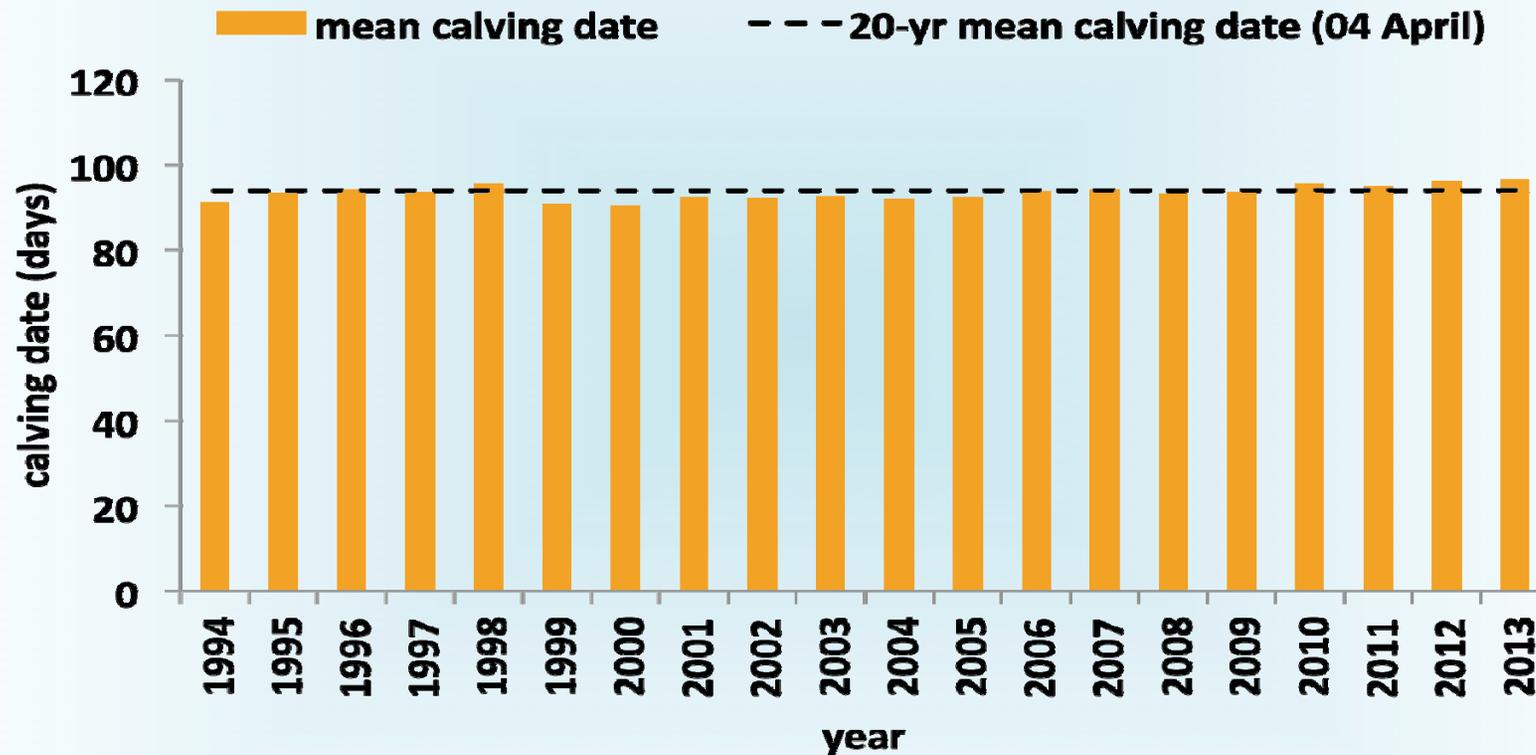
# We Know What Has Worked



# 20-year Average Calving Date



CHAPS20Y: mean calving date over time (years)





## Benchmarks



## Animal Performance

| <a href="http://www.chaps2000.com/benchmarks.htm">www.chaps2000.com/benchmarks.htm</a> 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

| <a href="http://www.chaps2000.com/benchmarks.htm">www.chaps2000.com/benchmarks.htm</a> 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](http://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

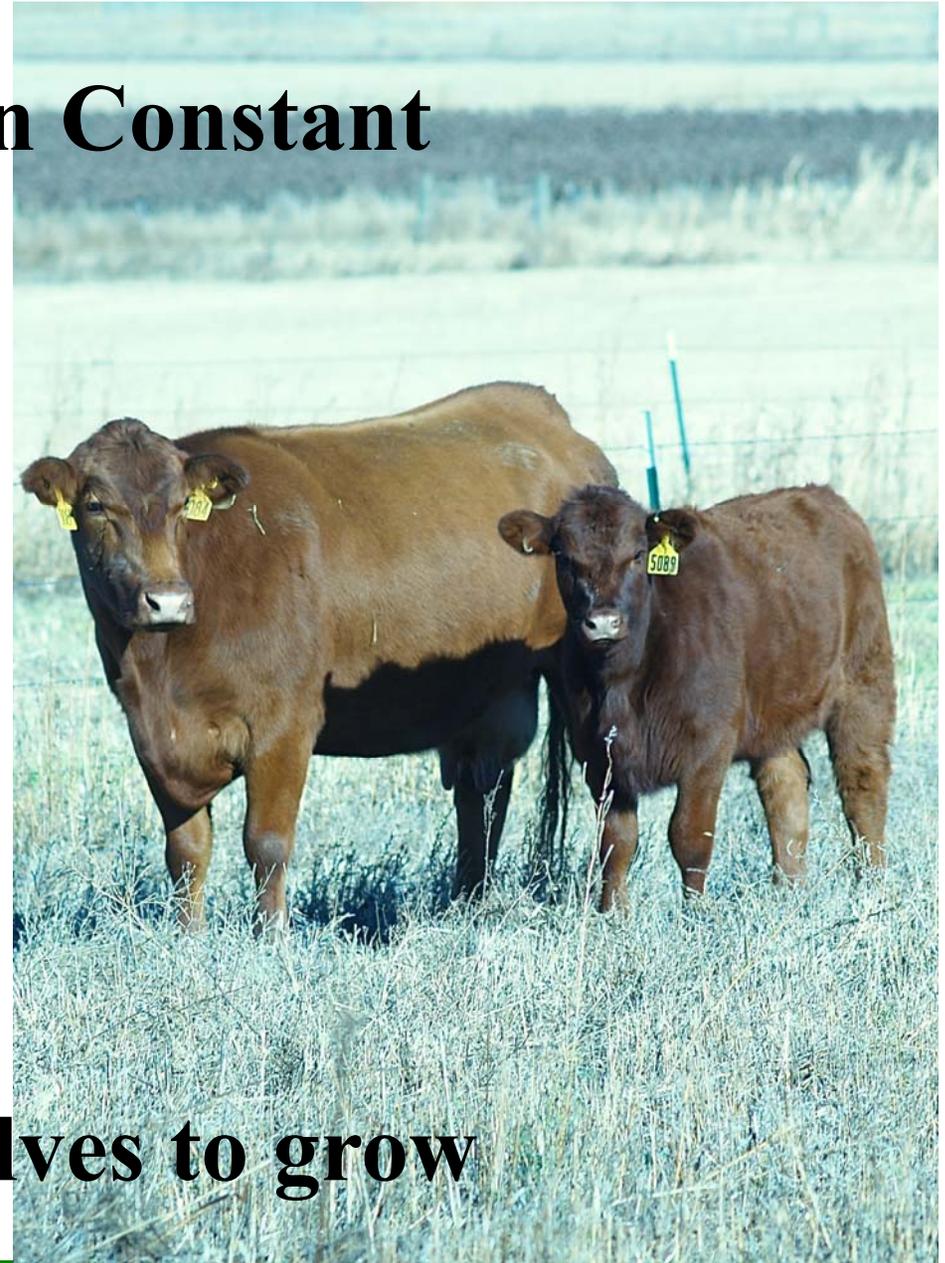
|   |      |
|---|------|
| <a href="http://www.chaps2000.com/benchmarks.htm">www.chaps2000.com/benchmarks.htm</a> as of March 29, 2015 |      |
| % Cows Calving at 42 Days   | 86.4 |
| Cow Age   | 5.5  |
| Cow Weight  | 1418 |
| Cow Body Condition Score  | 5.9  |

# Things That Remain Constant



Nutritional requirements of cows

# Things That Remain Constant



**Need for calves to grow**

# Why look at something different?

May-June calving presents opportunities

❖ Decreased labor need

❖ Reduced facilities

❖ Matching feed to 3<sup>rd</sup> trimester needs

❖ Potential to capture profit



# WEATHER IS ALWAYS A CONCERN!

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



# May-June Calving

# Dickinson Research Extension Center Ranch Headquarters, Manning, ND



**March-April Calving Data**

**2009-2011**

**May-June Calving Data**

**2012-2014**

# Herd H38 Management



|                                   |                |                 |
|-----------------------------------|----------------|-----------------|
|                                   | <b>Mar-Apr</b> | <b>May-June</b> |
| <b>Bull Turnout</b>               | <b>1-Jun</b>   | <b>1-Aug</b>    |
| <b>Official Start of Calving*</b> | <b>15-Mar</b>  | <b>7-May</b>    |
| <b>Average Calving Date</b>       | <b>29-Mar</b>  | <b>25-May</b>   |
| <b>Start of Third Trimester</b>   | <b>12-Dec</b>  | <b>12-Feb</b>   |

\* = Average date when 3<sup>rd</sup> cow in herd calves

# Herd H38

## Animal Performance



| Critical Success Factors | Mar-Apr<br>2009-2011 | May-June<br>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<br>2009-2011 | May-June<br>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<br>2009-2011 | May-June<br>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<br>2009-2011 | May-June<br>2012-2014 |
|--------------------------|----------------------|-----------------------|
| % 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                 |

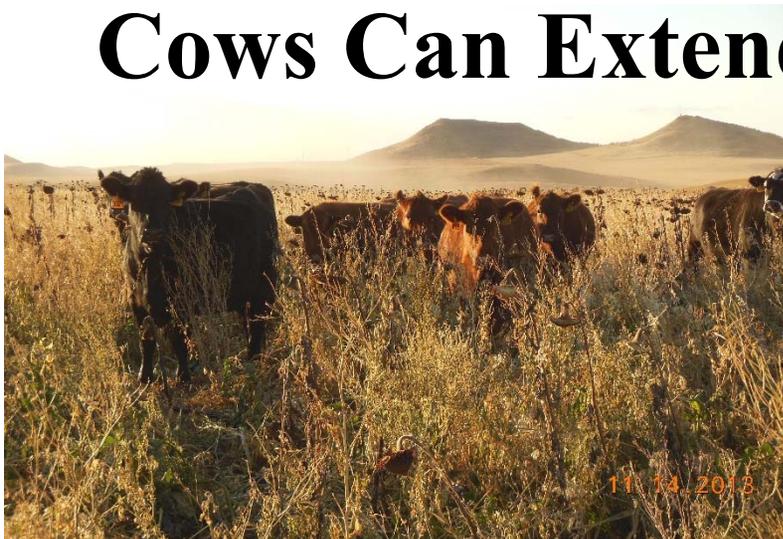
# Cows Can Extend the Grazing Season



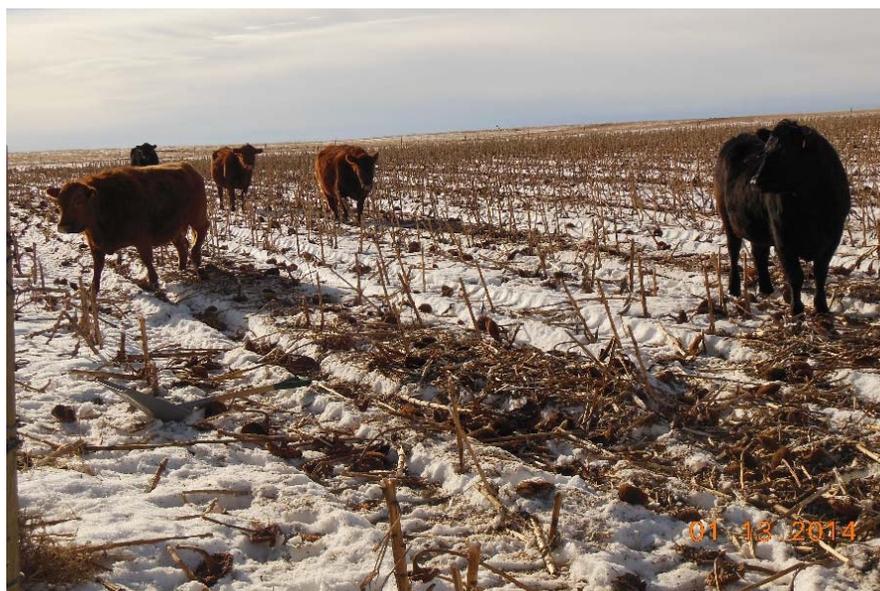
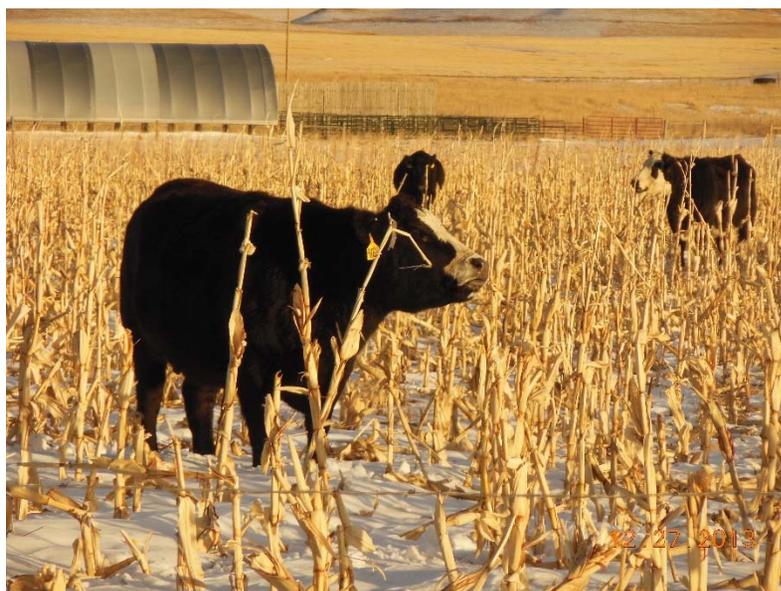
Grazing stockpiled mixed pastures of brome grass and crested wheatgrass followed by corn stalk residue

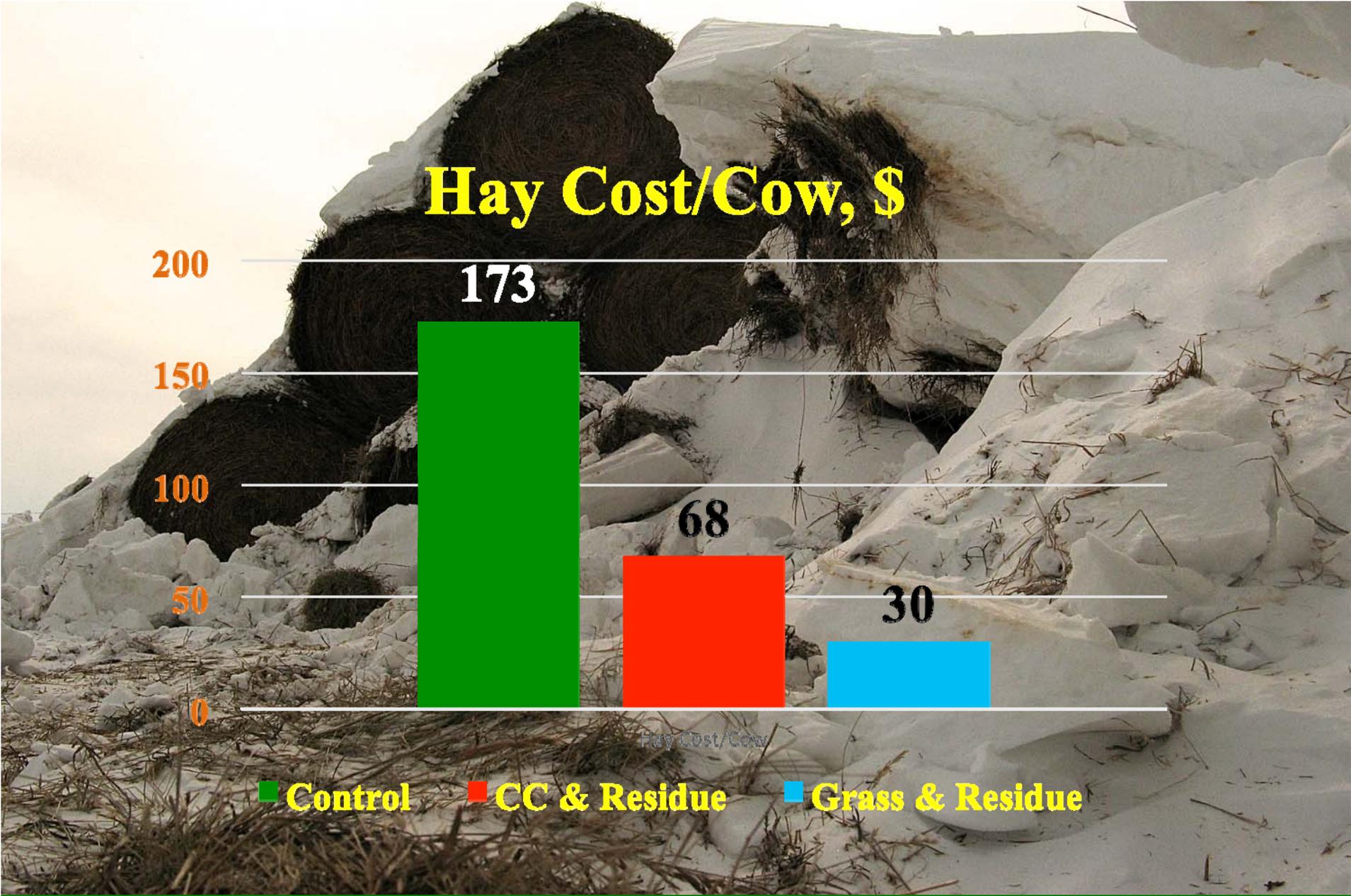


# Cows Can Extend the Grazing Season

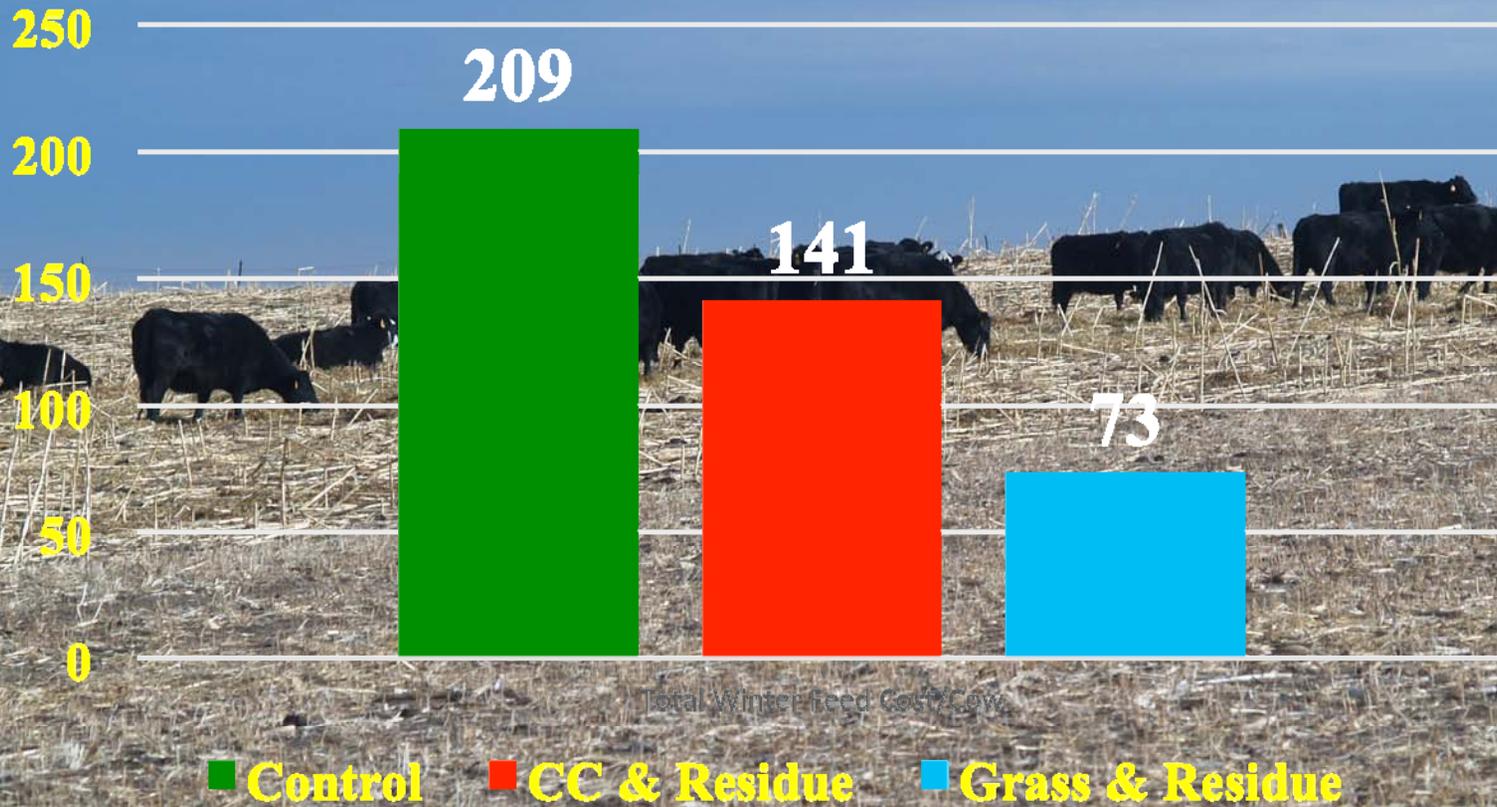


**By Utilizing  
Cover Crops  
Crop Residue**





# Total Winter Feed Cost/Cow



# 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?**

# The Next Step:

# JANUARY WEANING

# The Next BIG Question



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

# 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

# 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**



# 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**

# 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**

# 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**

|   | Jan         | Feb       | Mar             | Apr        | May        | Jun     | Jul           | Aug     | Sep                     | Oct     | Nov            | Dec     |   |                                 |          |                                 |          |  |
|---|-------------|-----------|-----------------|------------|------------|---------|---------------|---------|-------------------------|---------|----------------|---------|---|---------------------------------|----------|---------------------------------|----------|--|
| June 1 Calving  |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| month of gest   | 5           | 6         | 7               | 8          | 9          | Calve   |               |         |                         |         |                |         | Wean                                      | 500 weaning wt 12/6             | 180 days |                                 |          |  |
| month feed cost   | 25          | 27        | 27              | 34         | 34         | 25      | 25            | 25      | 25                      | 25      | 35             | 35      |   | 356.7 total including 10% waste |          |                                 |          |  |
| feed resource   | crp hay     | crp hay   | crp hay         | grass hay  | grass hay  | pasture | pasture       | pasture | pasture                 | pasture | pasture        | pasture | grass hay                                 |                                 |          |                                 |          |  |
| March 1 calving   |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| month of gest   | 8           | 9         | Calve           |            |            |         |               |         |                         |         |                |         | wean                                      | 6                               | 7        | 600 wean weight 10/15           | 225 days |  |
| month feed cost   | 34          | 37        | 50              | 52         | 50         | 25      | 25            | 25      | 25                      | 25      | 22             | 20      | 28  |                                 |          | 415.3 total including 10% waste |          |  |
| feed resource   | grass hay   | grass hay | hay/silage      | hay/silage | hay/silage | pasture | pasture       | pasture | pasture                 | pasture | pasture        | pasture | crp hay                                   |                                 |          |                                 |          |  |
| Income at weaning   |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
|   | weaning %   |           | Weaning Weight  |            | Price      |         | Cow feed cost |         | net above cow feed cost |         |                |         |   |                                 |          |                                 |          |  |
| June Calving  | 0.97 *      |           | 500 *           |            | 1.8 -      |         | 356.7 =       |         | 516.3                   |         |                |         |   |                                 |          |                                 |          |  |
| March Calving   | 0.94 *      |           | 600 *           |            | 1.65 -     |         | 415.3 =       |         | 515.3                   |         |                |         |   |                                 |          |                                 |          |  |
| Income after Backgrounding  |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
|   | marketing % |           | Shipping weight |            | Price      |         | cow feed cost |         | background days         |         | feed-yard cost |         | net above cow and backgrounding feed cost |                                 |          |                                 |          |  |
| June calving  | 0.96 *      |           | 675 *           |            | 1.63 -     |         | 356.7 -       |         | 120 *                   |         | 1.1 =          |         | 567.5 hay plus DDGS supplement for        |                                 |          |                                 |          |  |
| March calving   | 0.93 *      |           | 850 *           |            | 1.45 -     |         | 415.3 -       |         | 105 *                   |         | 1.5 =          |         | 573.4 hay -silage - DDGs for 2.5 adg      |                                 |          |                                 |          |  |
| Assume equal cow death loss and pregancy percent, additional cost estimates |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| cow ownership   | 145         |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| health/vet  | 20          |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| fuel/utilities  | 38          |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| breeding  | 30          |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| equipment   | 21          |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| facilities  |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| supplies  | 13          |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| repairs   | 48          |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| labor   |             |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| interest  | 6           |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |
| Total   | 321         |           |                 |            |            |         |               |         |                         |         |                |         |   |                                 |          |                                 |          |  |