



Beef Herd Management Options

What information is important, how to analyze it,
GOLD Indicators, WCCCS, Managing for Profit

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Overview

- Importance of Production Records
- Importance of Analyzing Production Records
- Record This – Production Records to Keep
- Calculate That – Simple Formulas
- Tools – Apps & Programs to Help Store & Analyze Production Records

Production Records Are Important

Agree or Disagree?

The area of beef cattle management that usually gets the least attention is the task of collecting, maintaining, and utilizing records. Records are important on many different levels and should serve as the centerpiece of any good management program. The level of record keeping practiced on a farm often defines the level of success that the operation can expect to achieve. Even the best operational managers can consider only a limited number of factors into each decision they make, whether short or long term. The ability to review historical information and use it in the decision-making process is the single factor that separates the premier managers from those who just “do a good job.”

Production Records – Why?

- You cannot manage what you do not measure
- You can't get where you're going unless you know where you're at
- With proper records → decisions can be made on the reproductive, productive and financial status of the herd (Bullock & Laurent)



Production Records – Why?

- Production performance drives profitability
- Cost of Production → Unit Cost, aka...
- Break-even...what you need to sell your calves for...
- Fluctuates with production performance

$$\text{Break-even Price} = \frac{\text{Total Costs}}{\text{Total Lbs of Calf Weaned}}$$

Or

$$\text{Unit Cost of Production}$$



What Influences Lbs of Calf Weaned?

- Conception rate
- Calving rate
- Calving Distribution
- Calf death loss
- Wean rate
- Wean Weight

Production Records Need to be Analyzed

Records Need to be Analyzed

- Most producers collect some level of records
- Few take the data and make calculations on a herd level
- And even fewer have a data analysis system to track lifetime productivity of an individual cow

Records Need to be Analyzed

- Herd level analysis is good, but
- Records on a per cow basis is better
- Year over year analysis for your herd and the individual females is invaluable
- Benchmarks to compare yourself to can also be helpful to make sure you're on the right track

Record This

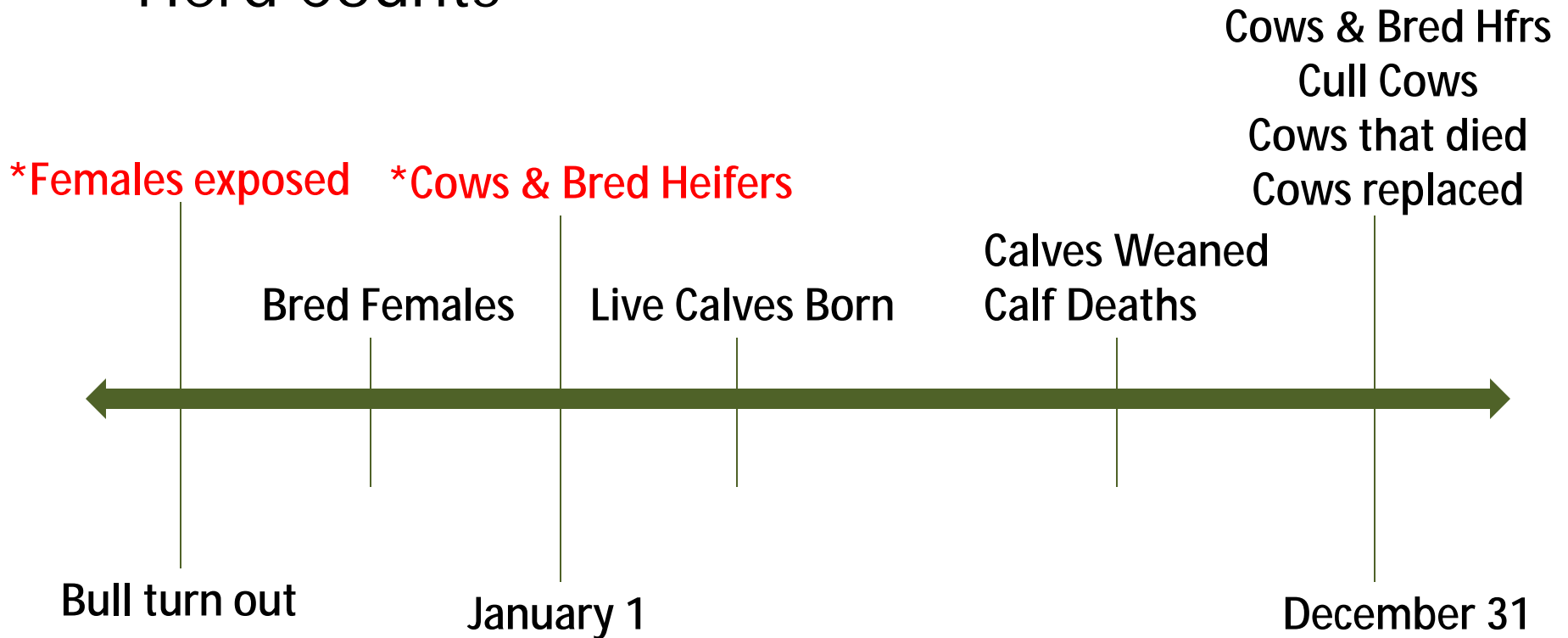
Production Records to Keep

- Individual Animal ID
 - Electronic RFID
 - Management Tag → Letter Year used at WBDC

Year	Letter	Year	Letter	Year	Letter
2010	X	2015	C	2020	H
2011	Y	2016	D	2021	J
2012	Z	2017	E	2022	K
2013	A	2018	F	2023	L
2014	B	2019	G	2024	M

Production Records to Keep

- Herd Counts



**These are the two critical times to count females.*

Production Records to Keep

- Herd Counts
- Calving Dates
 - Cows that calve early in the calving season, tend to continue to do so throughout their lives, and are the most productive and fertile cows in the herd
 - Calculate calving distribution à Aim for >70% of females calving in first 21 d

Production Records to Keep

- Herd Counts
- Calving Dates
- Body Condition Score – at Weaning & Calving
 - Aim for 2.5 to 3 on scale of 1 (Thin) to 5 (Fat)
- Weights
 - Cow at Weaning
 - Calf at Birth & Weaning
 - Heifer weight at breeding

Production Records to Keep

- Culling Reasons
- Fertility Records
 - Breeding Soundness for Bulls
 - Pregnancy Test for Females
- Death Loss
 - Number, Type, Reason
- Health Records
 - Vaccinations, Parasite Control, Treatments

Production Records to Keep

- For each calf born, ideally track:
 - Dam ID
 - Birth date
 - Calf ID, Management Tag, CCIA (RFID), or Both
 - Sex
 - Calving Ease
 - Sire
 - Birth weight
 - Wean weight
- These records are fields in VBP's calving book**

Calculate That

How are These Calculated?

- Conception rate
- Calving rate
- Calving Distribution
- Calf death loss
- Wean rate
- Wean Weight

Need to have:

- # Females Exposed
- # Pregnant/Open
- Calving Dates
- # Calves Born
- # Calves Died
- # Calves Weaned
- A Scale

Production Indicators

- Conception Rate = $\# \text{ Bred} / \# \text{ Females Exposed}$
- Calving Rate = $\# \text{ Live Calves} / \# \text{ Females Exposed}$
- Calving Distribution = $\% \text{ Females that Calve} / 21 \text{ d}$
- Wean Rate = $\# \text{ Calves Weaned} / \# \text{ Females Exposed}$
- Culling Percentage = $\# \text{ Culled} / \text{Jan 1 Count}$
- Cow Death Loss = $\# \text{ Cows that Died} / \text{Jan 1 Count}$
- Calf Death Loss = $1 - (\# \text{ Calves Weaned} / \# \text{ Born})$
- Lbs Weaned / Cow wintered

Production Indicators

$$\text{Adj. 205 day WW} = \frac{(\text{WW-birth weight})}{\text{weaning age in days}}$$

X 205

+ birth weight

+ age of dam adj. factor

Dam Age	Male	Female
2	+60	+54
3	+40	+36
4	+20	+18
5-10	0	0
11+	+20	+18

GOLD Production Indicators

- **G**rowth – lbs of calf weaned/Cow wintered; wean wt as % of dam weight should be 45 %+
- **O**pen rate – < 5% open cows
- **L**ength – of calving season 60-80 days
- **D**eath – loss on calves should be < 5%

AB GOLD Indicators

	2010 Total	2010 Low-Cost	2006-10 Low-Cost
G rowth (WWT lbs)	577.2	566.8	571.2
O pen Cows (%)	11.7	8.8	9.1
L ength of Calving Period, d	98.6	84.1	95.2
D eath Loss on Calves (%)	4.7	3.9	3.5

Source: Kaliei, D. AgriProfit\$, AB Agriculture & Rural Development

WBDC's GOLD Indicators

	2010	2011	2012	2013	2014	5 YR AVG
Avg Wean Weight, lbs	511	534	506	496	491	508
Opens, %	7.6%	6.5%	8.2%	8.2%	7.9%	7.7%
Calving Period, days	73	66	76	68	81	73
Calf Death Loss, %	5.3%	6.1%	6.2%	7.8%	4.7%	6.0%

Source: WBDC Production Records

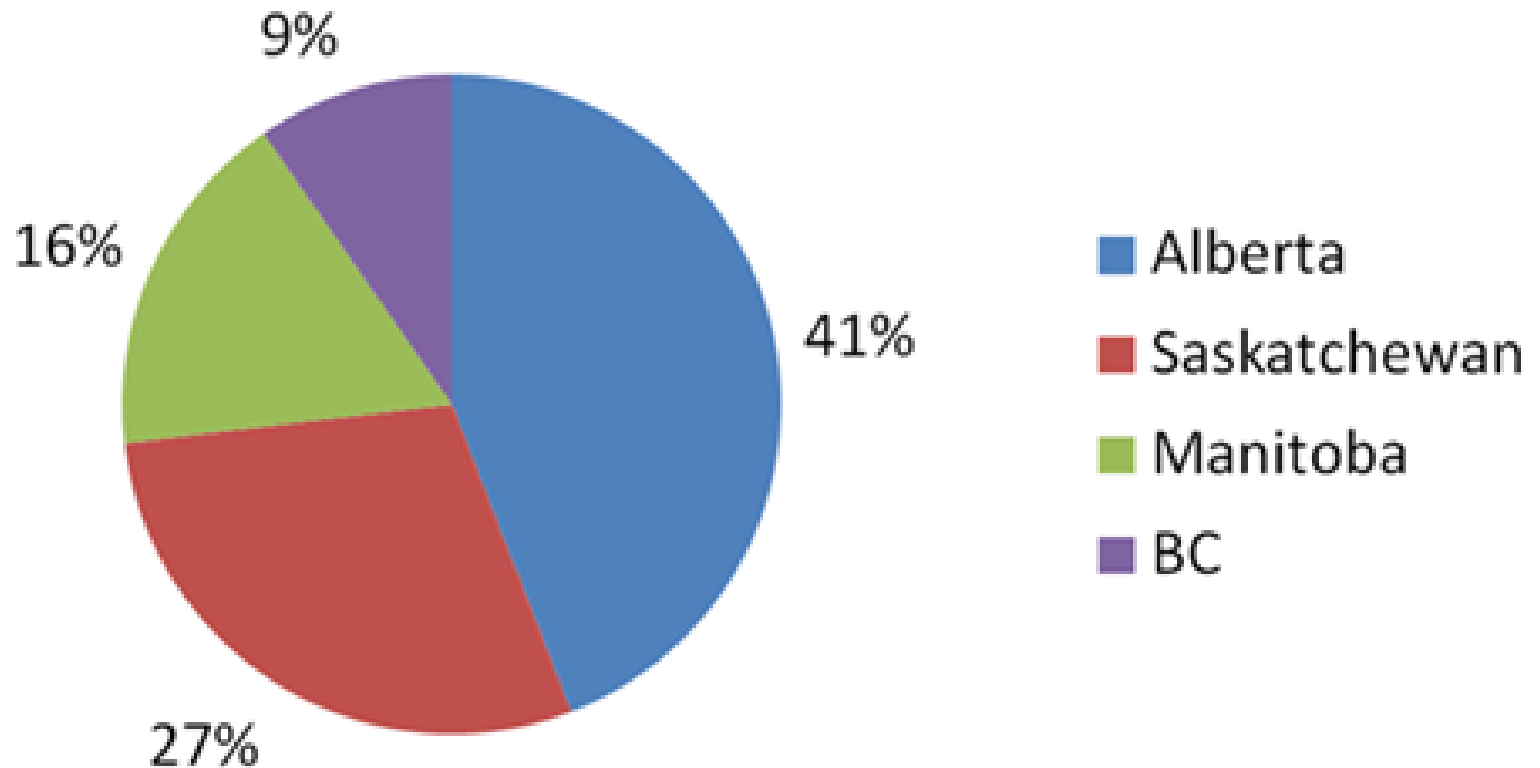


Western Canadian Cow-Calf Survey

www.wbdc.sk.ca/wcccs.htm

Preliminary Results

Online Respondents



Preliminary Results

- Avg age of respondents: 46 yrs
- Avg herd size: 187 hd
- Avg breeding season length: 88 d
- Avg percent open: 9%
- % of operations that preg check: 58% cows;
– 70% heifers
- % that implanted: 24%
- % that creep fed in 2014: 16%
- % that Body Condition Score: 8%

Apps & Programs

Is the Investment Worth It?

- Avg Cost of Production....\$650 per cow
- If you can identify one female that is under performing each year → record keeping program paid for
- Time is right → 70% Rebate Available for most higher-priced programs
- Get better before you get bigger → Better prepared for next downturn in P cycle

Record Keeping Tools

- VBP Pocket Book FREE
- iCalve App \$10
- CowChips, Chaps \$50
- Calfbook \$250/yr
- bioTrack \$350/yr + \$1/cow/yr
- CattleMax \$5-60/month
- HerdTrax \$3K + \$1-20/cow/yr

	iCalve	CowChips & Chaps	CalfBook VetAgri-Health
Cost	\$10	\$50	\$250/year
70% Traceability Rebate?	No	N/A	No
Platform	iTunes App (Install on iPhone, iPad)	Install on PC Computer	Web-based with Android interface
Description	Calving Book App	Individual Female Record Keeping	Individual Female Record Keeping
Captures	Calving Records, Deaths, Cull List, Treatments, Herd Data	Calving records by dam, death & culling records, treatments	Calving records by dam, death & culling records, treatments
Reports	PDF of input only	Built-in Reports	Built-in Reports
Limitations	Does not calc. performance #'s; Exports to PDF only	Currently being upgraded	Smartphone – Android Only

	BioTrack	CattleMax	HerdTrax
Cost	\$350/yr + \$1/cow/yr	\$9-60/month	\$3K Start-up + \$/cow/year
70% Traceability Rebate?	Yes	Yes	Yes
Platform	Web-based	Web-based	Web-based
Description	Individual Female Record Keeping	Individual Female Record Keeping	Individual Female Record Keeping with Advisory Services
Captures	Individual Animal Records – Calving, Cull, Death; Treatments, Moves, Costs	Individual Animal Records – Calving, Cull, Death; Treatments, Moves, Costs	Individual Animal Records – Calving, Cull, Death; Treatments, Feedlot Performance
Reports/ Features	Built-in & Custom Reporting; Auto age-verify Auto BIXS data fill	Built-in & Custom Reporting;	Daily Reports Carcass Data Vet-Client Relation Proof & Post Verify

Closing Comments

- Phenotypic records are the stepping stone to genomics
- Production records need to be analyzed for informed decision-making – identify strengths, weaknesses
- Year-over-year analysis of each female and herd is invaluable
- Compare with benchmarks → Am I on the right track?
 - Fill in the WCCCS survey to help generate benchmarks
- Tools range from free to \$1000's
 - With increasing cost comes increasing features
 - Use the 70% traceability rebate!



Any Questions?

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