

TOTAL RANCH ANALYSIS COLORADO (T.R.A.C.): Theo R. Ethical Case Study

Example Analysis

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PROJECT INTRODUCTION

Total Ranch Analysis for Colorado (T.R.A.C.) was developed as a statewide collaborative partnership in extension program involving campus faculty, extension personnel, cattlemen's associations, and beef producers. Participant ranches are provided an in-depth financial, production, and management analysis of the ranch, using a standardized methodology. T.R.A.C. team members make on-site ranch visits to meet with producers, listen to their unique successes and challenges, and collect an array of production and financial data. Data collected is analyzed to determine critical production, financial and integrated measures. A customized report is given to the ranch which provides a unique opportunity to identify areas to reduce cost of production and improve production and marketing efficiency. The long-term goal is to improve ranch family livelihoods through a dedicated partnership around continual analysis and integration of animal-, human-, and resource-oriented program pillars. Key metrics and benchmarks developed through T.R.A.C. will strengthen producer and educator knowledge of production and financial targets and increase the value of cow-calf management recommendations in Colorado.

INTERNSHIP GOALS

- Provide ranch level exposure to a wide variety of management and marketing systems
- Learn the process of obtaining, analyzing, and evaluating ranch financial and performance information
- Create a case study ranch for use in explaining the program and demonstrating results.
 - Theo R. Ethical Ranch

HOW DOES THIS APPLY TO YOUR EDUCATION

T.R.A.C. provided us with a great opportunity to apply our classroom education around herd health and management while additionally enhancing our understanding of beef cattle ranching in Colorado. We both have a strong interest in beef cattle medicine, and this opportunity was a great way for us to learn more about ways we, as future veterinarians, can be an even greater asset to our future clients' team. This internship applies to my education in the following ways:

- Career exploration and ability to apply knowledge from the classroom to real-world experience
- Gain field experience and increase marketability by building my resume

RESULTS

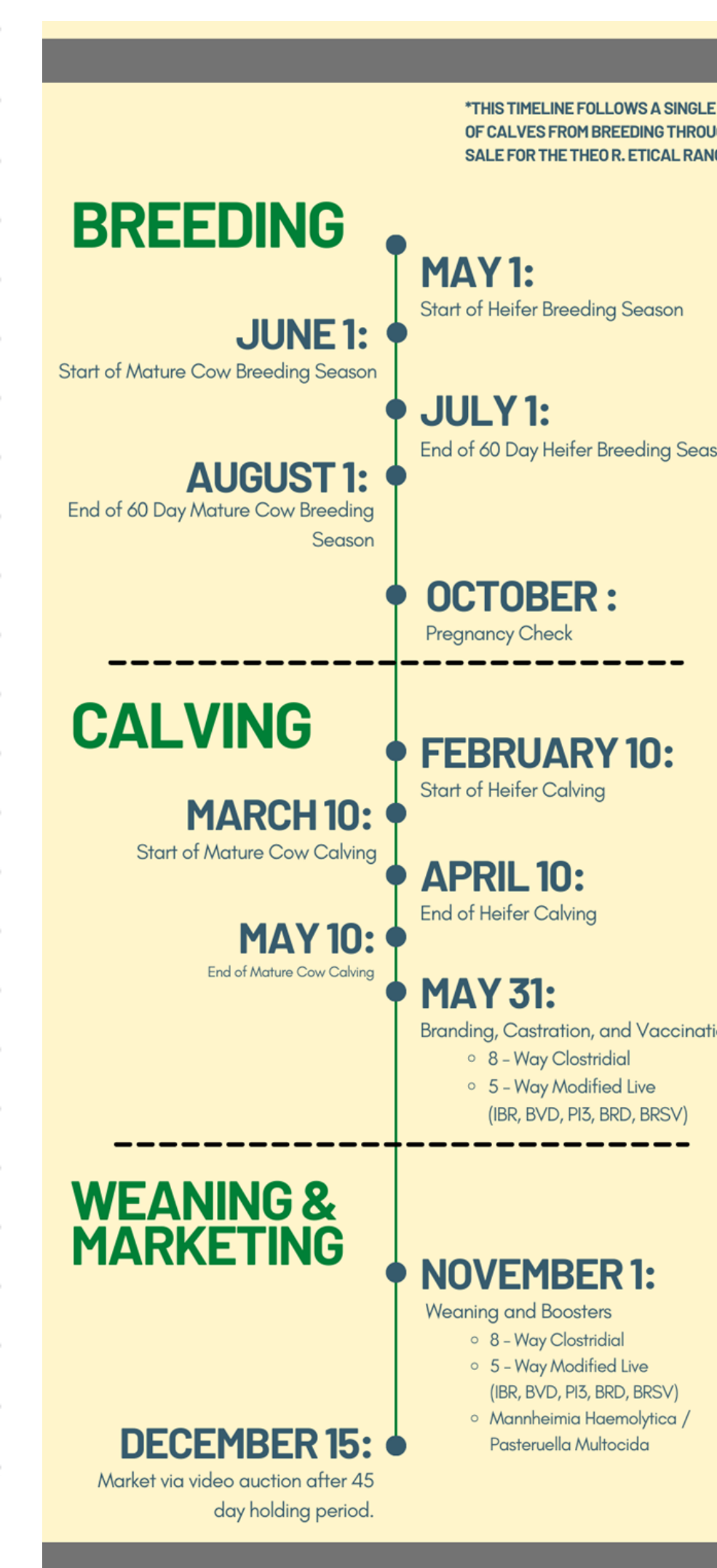
Table 1 - Cow calf enterprise data

Table 1 - Cow-Calf Production			
	Target	Benchmark	2020
Breeding Females	37 herds	2036	541
Acres/Female	-	29.4	45.68
Feed Fed/Exposed Female (lbs)	-	-	2135.33
Normal Rainfall (%)	-	98.8	88.98
Pregnancy (%)	90	88	93.47
Calving (%)	85	83.1	89.70
Weaning (%)	83	79.7	85.74
Female Replacement Rate (%)	-	-	18.04
Weaning Weight (lbs)	550	557	567.39
Lbs Weaned/Exposed Female (lbs)	460	442	485.08
Lbs Weaned/Acre (lbs)	-	31	14.09

Table 2 - Cow cost breakdown

Table 2 - Cow-Cost			
Operating Expenses/Female (\$)	Target	Benchmark	2020
Depreciation-Livestock	120	119.81	166.97
Hired Labor & Management	200	209.42	121.74
Feed Purchased	125	139.40	121.31
Interest	6	19.73	76.65
Rent or Lease	40	55.98	130.54
Utilities	18	22.16	38.24
Property Taxes	18	17.31	12.14
Insurance	22	28.28	42.18
Veterinary & Breeding	30	41.92	50.55
Supplies	13	16.61	27.28
Gasoline-Fuel-Oil	30	27.78	38.94
Professional Fees	10	10.75	19.58
Custom Hire	22	27.99	45.38
Depreciation-M&E	60	56.38	47.20
Miscellaneous	18	22.77	16.41
Repairs & Maintenance	60	62.42	53.00
Chemicals	20	22.05	6.29
Freight & Trucking	5	5.40	18.71
Depreciation-B&I	60	61.84	32.67
Fertilizer	25	26.46	2.28
Seed & Plants	3	4.88	5.35
Total Costs/Female (\$)	905	999.34	1073.40

Figure 1 - Production timeline



Key Results:

- In 2020, Theo R. Ethical Ranches had a net income of **-\$14,804.34**
 - Annual cow cost was \$1073.40
 - Cost to produce a CWT of weaned calf was \$202.67

DATA COLLECTION and METHODS

- Data utilized was previously collected from previous T.R.A.C. Analysis (6) ranches from various areas across Eastern Colorado.
- Data dates ranged from 2018-2020
- Data was anonymized and averaged for each category on T.R.A.C. Reports.
- Market prices for the various fictitious inventory items was pulled from auction and retail sites to obtain realistic values.
- Timeline data was generated based on typical management of Colorado rangeland ranches.

WHAT YOU LEARNED

A few key things We learned during my T.R.A.C. internship were:

- Proper record-keeping and transforming data into knowledge for better decision making are a key component in ranch management
- Hidden non-cash expenses such as cattle and equipment depreciation can significantly affect cow costs and future ranch profitability
- Differing philosophy behind cow/calf ranch management and herd health goals
- Subsidies and alternative income play a big role in many ranches' overall profitability

NEXT STEPS

- Our hope is that through the creation of a case study example, producers will be able to better understand the T.R.A.C. process, the information required, and the benefits of participating in the T.R.A.C. program.
- Future case studies can be created using this process to represent various enterprises beyond cow calf for future potential marketing, education, and research endeavors.

