# Seven Mile Creek Ranch Land and Cattle Investment Analysis 

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## Overview

- Investor assumptions
- Ranch overview
- Investment options
- Leasing
- Running
- CD option
- Return on equity analysis
- Conclusions from research
- Weakness of research


## Investor Assumption

- Investor with knowledge of the cattle industry and ranch property market willing to run working cattle ranch as family business
- Open to the option of leasing out the entire ranch
- Open to the option of not investing money in ranch property and instead FDIC insured certificates of deposit
- Investment will be considered for a maximum of ten years


## Ranch Overview

- http://www.clarklandbrokers.com/brochures/S evenMileCreekRanch.pdf
- 30 miles north of Lingle, 27 miles south of Lusk
- 10,696 total acres, 10,176 deeded, 400 state 120 BLM
- Stocking rate of 400 cow/calf pairs year round
- List price \$5,300,000












## Purchasing Ranch Leasing Out

- Assume investor has the required list price
- Purchases entire ranch
- Leases out ranch to either cow calf or yearling producer
- Assumes owner does not manage the livestock

| Lease options |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| year around | \$ | 22.50 | cow calf | 400 | 12 | \$ | 108,000.00 |
| may 15-october 1 | \$ | 17.00 | yearling | 900 | 4.5 | \$ | 68,850.00 |
| 4.5 months |  |  |  |  |  |  |  |
| Net of taxes and leases |  | $\begin{aligned} & 109.72 \\ & 45.03 \\ & 8.60 \end{aligned}$ |  |  |  |  |  |
| Cow calf lease Net <br> Profit $\$ 101,096.65$ |  |  |  |  |  |  |  |
| Yearling Net Profit |  | \$61,946.65 |  |  |  |  |  |

## Leasing ROE

- Leasing out to yearlings 1.17\%
- Leasing out to cow/calf 1.91\%


## Running Cows

- Assume 400 head of cows will be used to stock the ranch
- 2 options, either having the cattle or taking a loan out to purchase necessary stocking livestock
- Loan for \$500,000 at 4\% interest over 10 year period, assumed repaired in equal total payments

|  | Cow Cash Costs |  |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | quantity | dollars | total |  |
| labor | 2 | $\$ 35,000.00$ | $\$$ | $70,000.00$ |
| feed | 400 | $\$ 125.00$ | $\$$ | $50,000.00$ |
| vet | 1 | $\$ 6,000.00$ | $\$$ | $6,000.00$ |
| utilities | 1 | $\$ 6,552.00$ | $\$$ | $6,552.00$ |
| phone | 1 | $\$ 1,622.70$ | $\$$ | $1,622.70$ |
| repairs | 1 | $\$ 8,270.80$ | $\$$ | $8,270.80$ |
| gas | 1 | $\$ 8,492.10$ | $\$$ | $8,492.10$ |
| parts \& tires | 1 | $\$ 2,000.10$ | $\$$ | $2,000.10$ |
| vehicle repair | 1 | $\$ 2,491.92$ | $\$$ | $2,491.92$ |
| licenses | 1 | $\$ 1,687.00$ | $\$$ | $1,687.00$ |
| brand inspection | 1 | $\$$ | 665.20 | $\$$ |
| insurance | 1 | $\$ 8,776.40$ | $\$$ | $8,776.40$ |
| taxes | 1 | $\$ 6,109.72$ | $\$$ | $6,109.72$ |
| lease fees | 1 | $\$$ | 793.63 | $\$$ |
| sale barn expenses | 376 | $\$$ | 25.00 | $\$$ |
| Total Expenses |  |  | $9,400.00$ |  |


| Cow Cash Income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sell/ <br> replacement rate | Income | quantity | pounds | price | dollars |
| 0.93 | calves | 312 | 550 | \$1.03 | \$176,748.00 |
| 0.12 | cull cows | 48 | 1200 | \$0.45 | \$ 25,920.00 |
| 0.2 | cull bulls | 4 | 1800 | \$0.65 | \$ 4,680.00 |
|  | Replace heifers | 12 | 850 | \$0.85 | \$ 8,670.00 |
| Total Revenue |  |  |  |  | \$207, 348.00 |


| Cow Cash Costs - with Loan |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | quantity | dollars |  | total |  |
| labor | 2 | \$ | 35,000.00 | \$ | 70,000.00 |
| feed | 400 | \$ | 125.00 | \$ | 50,000.00 |
| vet | 1 | \$ | 6,000.00 | \$ | 6,000.00 |
| utilities | 1 | \$ | 6,552.00 | \$ | 6,552.00 |
| phone | 1 | \$ | 1,622.70 | \$ | 1,622.70 |
| repairs | 1 | \$ | 8,270.80 | \$ | 8,270.80 |
| gas | 1 | \$ | 8,492.10 | \$ | 8,492.10 |
| parts \& tires | 1 | \$ | 2,000.10 | \$ | 2,000.10 |
| vehicle repair | 1 | \$ | 2,491.92 | \$ | 2,491.92 |
| licenses | 1 | \$ | 1,687.00 | \$ | 1,687.00 |
| brand inspection | 1 | \$ | 665.20 | \$ | 665.20 |
| insurance | 1 | \$ | 8,776.40 | \$ | 8,776.40 |
| taxes | 1 | \$ | 6,109.72 | \$ | 6,109.72 |
| lease fees | 1 | \$ | 793.63 | \$ | 793.63 |
| loan payments | 1 | \$ | 61,646.00 | \$ | 61,646.00 |
| sale barn expenses | 376 | \$ | 25.00 | \$ | 9,400.00 |
| Total Expenses |  |  |  |  | , 507.57 |


| Cow Cash Income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sell/ <br> replacement rate | Income | quantity | pound s | price | dollars |
| 0.93 | calves | 312 | 550 | \$1.03 | \$176, 748.00 |
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| Bank Loan Amortization |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Payment | Interest |  | Principal |  | $\$ 500,000.00$ |
|  |  |  |  |  |  |  |
| 1 | \$61, 646.00 | \$ | 20,000.00 | \$ | 41,646.00 | \$458, 354.00 |
| 2 | \$61,646.00 | \$ | 18,334.16 | \$ | 43,311.84 | \$415, 042.16 |
| 3 | \$61,646.00 | \$ | 16,601.69 | \$ | 45,044.31 | \$369, 997.85 |
| 4 | \$61,646.00 | \$ | 14,799.91 | \$ | 46,846.09 | \$323,151.76 |
| 5 | \$61,646.00 | \$ | 12,926.07 | \$ | 48,719.93 | \$274,431.83 |
| 6 | \$61, 646.00 | \$ | 10,977. 27 | \$ | 50,668.73 | \$223,763.10 |
| 7 | \$61,646.00 | \$ | 8,950.52 | \$ | 52,695.48 | \$171, 067.63 |
| 8 | \$61, 646.00 | \$ | 6,842.71 | \$ | 54,803.29 | \$116,264.33 |
| 9 | \$61, 646.00 | \$ | 4,650.57 | \$ | 56,995.43 | \$ 59, 268.91 |
| 10 | \$61,646.00 | \$ | 2,370.76 | \$ | 59,275.24 | (6.34) |

## Running Cows

- Net profit from cow operation with no loan \$24,486.43
- ROE 0.46\%
- Net profit from cow operation with loan
-\$37,159.57
- ROE -0.70\%


## Federal Deposit Insurance Corporation

 CD's- Investor could simply spread the 5.3 million out into several certificates of deposit
- 1,5 and 10 year CD's will be considered


## Certificate of Deposit Rates

| Time | Rate | Invested <br> Amount | Total Money at end of <br> year | Interest <br> earned | ROE |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 | 2.5 | $5,300,000$ | $5,432,500.00$ |  |  |
| 5 |  |  |  | $\$ 132,500.00$ | $2.50 \%$ |
| 10 | 4.25 | $5,300,000$ | $6,294,737.00$ |  |  |


| Return on Equity of Investment Options |  |
| ---: | ---: |
| ROE for leasing to cow calf |  |
| ROE for leasing to yearling | $\mathbf{1 . 9 1 \%}$ |
| ROE for cow calf without loan | $\mathbf{1 . 1 7 \%}$ |
| ROE cow calf with loan | $\mathbf{0 . 4 6 \%}$ |
| ROE 1 year CD | $\mathbf{- 0 . 7 0 \%}$ |
| ROE 5 Year CD | $\mathbf{2 . 5 0 \%}$ |
| ROE 10 Year CD | $\mathbf{1 8 . 7 7 \%}$ |

## Conclusions

- Based on the ROE calculations the investor would be better off to invest in FDIC insured certificates of deposit
- If purchasing the ranch leasing out to cow calf operation shows the highest ROE
- All options with the exception of taking out a loan show positive ROE


## Weaknesses

- Price of ranch
- Livestock purchase and selling prices
- Yearling stocking rates
- Leasing out value doesn't take into account wear and tear on equipment
- Only money from the cow operation was considered, no additional enterprises were looked at


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## Questions?



