Dear Great Lakes Grazier,

Another great autumn has turned a highly variable grazing season across the State of Michigan into a decent over-all one for most. For two years in a row the month of September has brought adequate rain and above normal temperatures to most farms in the State. Again this year pasture, hay and other forage growth responded with abundant growth. Killing frosts again this year are arriving 20 – 30 days later than normal in many parts of the State. Late season pasture growth of cool season grasses like orchard grass, bluegrass and fescue is critical for next year’s forage production. Pasture forages that are given proper rest in September & October utilizing practices like managed intensive grazing are able to re-charge the carbohydrate storage in their roots and crowns to make them harder for the winter and more robust in their springtime growth. This spring many farms said they had good to excellent spring pasture and hay field growth, even in areas that were receiving less rain, and I believe part of the reason for that was the great fall weather that we experienced in the fall of 2015. If you can put your forages to bed this fall with a proper rest period in which they can attain over 8 inches of growth before the final grazing takes place, you should experience above normal growth in the spring of 2017.

Overall good forage growth in 2016 has made for some very reasonable hay prices. Hay supplies in Michigan are abundant for most hay types and hay prices have fallen (see the enclosed article for details). Combine that with lower grain prices, lower fertilizer, fuel, and land rent prices and the cost of the production side of grazing livestock looks favorable. However the revenue side of grazing livestock has fallen in some cases as dramatically, making profitability difficult for some. Two years ago record calf prices were around $2.40/lb. Last fall they tumbled $0.50 to $1.90/lb. This fall they have fallen another $0.50 to $1.40/lb. That is a drop of over $500/hd.! It is discouraging to see such a large drop in prices in such a short period of time. But looking back in history feeder calf prices were only $0.70 - $1.25/lb. as recently as the years 2006 – 2010. So if we only get $1.30/lb. this fall it will not be the end of the Michigan beef industry. Strategize ways to move your cost of production lower. There are opportunities out there if you only look for them. And there are ways to increase your revenues as well. See Phil Durst’s article in this newsletter.

The agricultural economy is always in a state of constant change. Keep your eye on the horizon watching for opportunities to improve your farm’s resources and bottom line. These lower prices will change in time!

Jerry Lindquist

MSU Extension Grazing Educator

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- Beef Deworming Project 2016 6-7
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Great Lakes Grazing Newsletter

Cow-calf economics and a peek behind the averages

Phil Durst, Michigan State University Extension Dairy & Beef Educator

It is a good time to be thinking about the costs and returns of your cow-calf business. Look for ways to better maximize your resources and to minimize the losses that keep your payday check lower.

Fall calf sales are coming up and visions of plump checks may be dancing in the heads of some cow-calf producers. Whether feeder calf sales are coming closer or just another week of sending calves to the auction barn, these days are paydays. That is why it is a good time to be thinking about the costs and returns of your cow-calf business.

Michigan State University Extension Beef Team worked with cow-calf producers around the state in 2013 to better understand the costs and returns these producers experienced. Data from 13 herds from the Lower to the Upper Peninsula were obtained, and round bales were weighed to track feed amounts and costs.

The herds in the study sold a total of 667 steer calves at an average price of $1.65 per pound in 2013. They sold 513 heifer calves at $1.54 per pound. Although nothing like the “once in a lifetime” prices of 2014, these were good prices.

It is not all about price, however. On average, the Cash Cost breakeven price was $1.74, an amount higher than the average sale price for the calves. So, on the average, these farms lost money in 2013. But who is average? And do averages really tell us an accurate story? Averages hide the range. They really need to be unpacked to see what is behind them.

When we start looking at the farms, we can detect many differences. One of the first that I see is the percentage of calves (steers and heifers) sold that were born. It is useful to separate the 13 farms into four groups and to look at the average percentage of calves sold per group.

Feeder Calf Sold as a Percentage of Total Births

First Group (3 farms): 66%
Second Group (3 farms): 76%
Third Group (4 farms): 81%
Fourth Group (3 farms): 92%

Some of the heifers were likely kept for replacements. Maybe some farms lost calves to sickness and death. Maybe some calves just weren’t ready to sell, but this is a business about producing calves to sell, so it seems that the farms in the Third and Fourth Groups did that better than the other farms. For a herd of 50 cows that all calved, the difference between the Third Group and the First Group is seven calves. If we assume a 600 pound sale weight at $1.65 per pound, the difference is more than $6,930.
Another glaring difference between these herds is that of the steer sale weight. The average was 621 pounds, but the range between the averages for farms was 545 to 715 pounds. That is a difference of 170 pounds! Yes, it is likely there was a difference in calving dates, but I believe the greater difference is in average daily gain, and that is a function of management and genetics.

When those steers went to sale, there were differences there as well. If we group the farms by the average steer sale weight, we see the typical price variation per lb. But look inside the sale price data at the range even within similar sale weights.

<table>
<thead>
<tr>
<th>Weight Range</th>
<th>Average Price</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>545–600 lbs.</td>
<td>$1.67</td>
<td>$1.50 – $1.85</td>
</tr>
<tr>
<td>601–650 lbs.</td>
<td>$1.65</td>
<td>$1.40 – $1.85</td>
</tr>
<tr>
<td>651–715 lbs.</td>
<td>$1.60</td>
<td>$1.60 – $1.60</td>
</tr>
</tbody>
</table>

There is a variation of $0.45 per pound within the calves that sold at 601–650 pounds. If a producer gained just $0.20 per pound for 50 calves sold, they would net $6,250 more at the sale.

But did the heavier calves cost more to raise? That question is a key one to answer because sometimes we spend money that does not make more money for the producer. What about here? When we group farms by their average steer weight and look at the cash cost of production and the cash cost breakeven price, it tells a powerful story.

<table>
<thead>
<tr>
<th>Group</th>
<th>Average steer weight</th>
<th>Total Cash cost/cow</th>
<th>Cash cost breakeven price</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Group</td>
<td>557</td>
<td>$1,119</td>
<td>$2.07</td>
</tr>
<tr>
<td>Second Group</td>
<td>593</td>
<td>$1,084</td>
<td>$1.98</td>
</tr>
<tr>
<td>Third Group</td>
<td>627</td>
<td>$1,013</td>
<td>$1.61</td>
</tr>
<tr>
<td>Fourth Group</td>
<td>692</td>
<td>$993</td>
<td>$1.50</td>
</tr>
</tbody>
</table>

The cost of production and the cash cost breakeven price needed for calves decreased as steer weight increased. The data from these farms show that there is greater profitability in producing and selling heavier calves.

Where do you stand? Comparing to others can help us realize the differences between herds and where you may have strengths or weaknesses. As you send calves to sale this fall, do some analysis of how your calves compare. How do your weights compare to others, and what do they do to raise heavier calves? How do your prices compare to others with similar weights, and why do buyers like their calves better?

We would also encourage you to calculate the percentage of calves born live that make it to sale. Calculate your costs of production. Look for ways to better maximize your resources and to minimize the losses that keep your payday check lower. If you are interested in analyzing your annual cost of production, contact your local MSU Extension beef educator.

This article was published by Michigan State University Extension. For more information, visit http://www.msue.msu.edu. To have a digest of information delivered straight to your email inbox, visit http://www.msue.msu.edu/newsletters. To contact an expert in your area, visit http://expert.msue.msu.edu, or call 888-MSUE4MI (888-678-3464).
### BREEDING CATTLE SALE SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>SALE NAME</th>
<th>PHONE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 16</td>
<td>1:00 pm</td>
<td>Low Stress Production Sale</td>
<td>(517) 712-1393</td>
<td>Sandusky</td>
</tr>
<tr>
<td>October 29</td>
<td>1:00 pm</td>
<td>Michigan Angus and Simmental Fall Production Sale</td>
<td>(406) 581-7940</td>
<td>St. Louis</td>
</tr>
<tr>
<td>November 5</td>
<td>1:00 pm</td>
<td>Farmers Livestock Graded &amp; Preconditioned Feeder Sale</td>
<td>(269) 962-7591</td>
<td>Battle Creek</td>
</tr>
<tr>
<td>November 6</td>
<td>1:00 pm</td>
<td>Great Lakes Hereford Roundup</td>
<td>(517) 256-3427</td>
<td>Williamston</td>
</tr>
<tr>
<td>November 25</td>
<td>3:00 pm</td>
<td>Lake Odessa Livestock Brood Cows &amp; Breeding Heifers</td>
<td>(616) 347-8213</td>
<td>Lake Odessa</td>
</tr>
<tr>
<td>December 3</td>
<td>1:00 pm</td>
<td>Farmers Livestock Special Brood Cow &amp; Feeder Calf Sale</td>
<td>(269) 962-7591</td>
<td>Battle Creek</td>
</tr>
<tr>
<td>December 22</td>
<td>3:00 pm</td>
<td>Lake Odessa Livestock Brood Cow &amp; Breeding Heifers</td>
<td>(616) 374-8213</td>
<td>Lake Odessa</td>
</tr>
</tbody>
</table>
# FEEDER CATTLE SALES

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>SALE NAME</th>
<th>PHONE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 18</td>
<td>Noon</td>
<td>West Branch Feeder Calf Sale</td>
<td>(989) 370-6200</td>
<td>West Branch</td>
</tr>
<tr>
<td>October 21</td>
<td>1:00 pm</td>
<td>United Producers Feeder Cattle Sale</td>
<td>(989) 872-2138</td>
<td>Cass City</td>
</tr>
<tr>
<td>October 24</td>
<td>6:00 pm</td>
<td>Ravenna Auction Feeder Calf Sale</td>
<td>(231) 853-5738</td>
<td>Ravenna</td>
</tr>
<tr>
<td>October 28</td>
<td>1:00 pm</td>
<td>Northern Michigan Livestock</td>
<td>(989) 732-5732</td>
<td>Gaylord</td>
</tr>
<tr>
<td>November 3</td>
<td>1:00 pm</td>
<td>Clare County Livestock Feeder Calf Sale</td>
<td>(810) 441-6191</td>
<td>Clare</td>
</tr>
<tr>
<td>November 3</td>
<td>5:00 pm</td>
<td>Lake Odessa Livestock Feeder Sale</td>
<td>(616) 374-8213</td>
<td>Lake Odessa</td>
</tr>
<tr>
<td>November 4</td>
<td>1:00 pm</td>
<td>United Producers Feeder Cattle Sale</td>
<td>(989) 681-2191</td>
<td>St. Louis</td>
</tr>
<tr>
<td>November 5</td>
<td>1:00 pm</td>
<td>Farmers Livestock Preconditioned Feeder Calf Sale</td>
<td>(269) 962-7591</td>
<td>Battle Creek</td>
</tr>
<tr>
<td>November 11</td>
<td>1:00 pm</td>
<td>Northern Michigan Livestock</td>
<td>(989) 732-5732</td>
<td>Gaylord</td>
</tr>
<tr>
<td>November 21</td>
<td>6:00 pm</td>
<td>Ravenna Auction Feeder Calf Sale</td>
<td>(231) 853-5738</td>
<td>Ravenna</td>
</tr>
<tr>
<td>November 25</td>
<td>5:00 pm</td>
<td>Lake Odessa Livestock Feeder Sale</td>
<td>(616) 374-8213</td>
<td>Lake Odessa</td>
</tr>
<tr>
<td>December 1</td>
<td>1:00 pm</td>
<td>Clare County Livestock Feeder Calf Sale</td>
<td>(810) 441-6191</td>
<td>Clare</td>
</tr>
<tr>
<td>December 2</td>
<td>1:00 pm</td>
<td>United Producers Feeder Cattle Sale</td>
<td>(989) 681-2191</td>
<td>St. Louis</td>
</tr>
<tr>
<td>December 3</td>
<td>1:00 pm</td>
<td>Farmers Livestock Feeder Calf Sale</td>
<td>(269) 962-7591</td>
<td>Battle Creek</td>
</tr>
<tr>
<td>December 9</td>
<td>1:00 pm</td>
<td>Northern Michigan Livestock</td>
<td>(989) 732-5732</td>
<td>Gaylord</td>
</tr>
<tr>
<td>December 12</td>
<td>6:00 pm</td>
<td>Ravenna Auction Feeder Calf Sale</td>
<td>(231) 853-5738</td>
<td>Ravenna</td>
</tr>
<tr>
<td>December 22</td>
<td>5:00 pm</td>
<td>Lake Odessa Livestock Feeder Sale</td>
<td>(616) 374-8213</td>
<td>Lake Odessa</td>
</tr>
</tbody>
</table>

Lists complied by the Michigan Cattlemen's Association
MSU Extension Beef Team Seeking Farms to Test Beef Herd for Internal Parasites

Demonstration Project:
Utilizing Fecal Egg Counts (FEC) to Determine Need for Internal Parasite Treatment and Identify Anthelmintic Resistance

Project Leaders: Frank Wardynski & Kable Thurlow

Location: Various farms across Michigan

Problem Statement:
Management practices regarding the use of anthelmintics have become a routine practice that is repeated annually on many farms. Producers frequently utilize the same dewormer administered at the same time of the year without any assessment if treatment is required. It is well documented that ruminant animals with low parasite infestation do not perform better than untreated animals. Producers can utilize FEC to determine the need for treatment.

Many producers have utilized FEC to determine the need for treatment and have identified classes of animals that have not required treatment. This practice saves money to producers, minimizes the chance of developing resistance within the parasite population and reduces the environmental impact associated with anthelmintic use.

Project Objectives:
Develop deworming management protocols based on FEC. Deworming recommendations will utilize FEC to make strategic determination of treatment with an Integrated Pest Management approach. Anthelmintics will be evaluated and a herd basis to determine if internal parasites are developing resistance to various drug classes.

Project Description:
Producers can participate at two separate levels. The first level is designed for producers that have not previously utilized FEC to determine need for treatment. Producers participating at this level should plan to collect fecal samples for submission and utilize the FEC results to determine treatment.

Producers can also utilize FEC to determine if parasites are developing resistance to the dewormers being used. Producers will collect manure samples at treatment and resample two weeks post treatment. The FEC will be evaluated to determine the effectiveness of the dewormer.

Producers can participate at both levels by collecting manure samples, using results to determine treatment, treating appropriate animal classes and collecting manure sample again two-week post treatment to determine product efficacy.

This project will work for large or small ruminants.

Project Protocol: Determining Treatment
Collect Fecal samples with palpation glove from 10% of each animal class with a minimum of three. Put manure from individual animals into sealable plastic bags. Label each bags with date, individual animal identification, and class of livestock (e.g. Mature cow, first calf heifer, or calf). Extract as much air from bags as possible before sealing. Place samples into ice cooler during sample collection. Store samples in refrigerator until shipping. Send in insulated container with ice packs. Don't freeze samples. Samples should be collected as close to shipping date as possible and as early in the week as possible. Samples cannot reach a temperature higher than 40 degrees Fahrenheit, or the eggs will hatch and the samples will show zero egg count.
Include contact information with producers name, address, Phone number, email address and contact information for Frank Wardynski, 725 Greenland Rd. Ontonagon, MI 49953, Phone 906-884-4386 or 906-281-0918 wardynsk@anr.msu.edu, or Kable Thurlow, 555 W Cedar Ave, Suite A, Gladwin, MI 48624, or (989) 426-7741, thurlowk@msu.edu

Send the samples to Dr. Gil Myers, 3289 Mt. Sherman Rd, Magnolia KY 42757

Upon receiving results, Contact Frank or Kable with results to determine treatment.

**Determining Resistance or Product Effectiveness**

Treat animals with anthelmintic product of choice. Collect fecal samples and send for analysis as described above. Wait two weeks post treatment and collect fecal samples to send in for analysis again. Results of the two samples will be compared to determine product effectiveness.

**Combination Protocol**

Collect fecal samples to determine need for treatment. If treatment is needed, treat with anthelmintic as soon as convenient. Wait two weeks post treatment and collect fecal sample again to determine product effectiveness.
Misty Acres Farm Pasture Walk
11593 N. Manistee County Line Rd.
Benzonia, MI 49616
Tuesday Oct. 18, 2016
5:30pm to 8:00pm
There will be Grass-Fed Galloway burgers, chips, doughnuts and apple cider at the conclusion of the walk.
RSVP is requested, but not required

Misty Acres Farm is located on a nature preserve owned and managed by the Grand Traverse Regional Land Conservancy. The farm has about 35 head of cattle, including cows, calves, and yearlings. Cattle are grass fed and rotationally grazed on 55 acres throughout the growing season and fed baled forage during the winter months.

Attendees will learn about:
• Production and Marketing of grass finished beef
• Soil fertility improvement methods
• Warm season grasses
• Silvopasture
• Extending the grazing season with annuals
• The Land Conservancy Mission

For further information, please contact
Kable Thurlow at 989-426-7741
thurlowk@aanr.msu.edu
or
Jerry Lindquist at 231-832-6130
lindquis@aanr.msu.edu

From Benzonia:
South on US-31 (~8 miles, head east on N. Manistee County Line Rd. (~2 miles)

From the Crystal View Gas Station, corner of M-115 & Weldon Rd. go south to Manistee County Line Rd. then head west for 4.5 miles, the farm is on the south side.
Field Day

WHEN: Wednesday, October 19, 2016
TIME: 5:30 PM - 7:30 PM
WHERE: Stamper Farm
10950 Bailey Drive
Harrison, MI 48625
Directions: From the intersection of M-61 & N. Clare Ave., head north on N. Clare Ave. for 8 miles, then turn left on Bailey Drive for 2 miles to the farm.

- Field Tour Discussing Cover Crops For Soil Health, Forage And Water Quality
- MAEAP Phase I Approved Meeting

Food Provided Door Prizes

For More Information:
Paul Gross, MSU Extension
(989) 317-4079 or grossp@anr.msu.edu

Jerry Lindquist, MSU Extension
(231) 832-6139 or lindquis@anr.msu.edu

Kable Thurlow, MSU Extension
(989) 426-7741 or thurlowk@anr.msu.edu

Karen Ickes, MAEAP Technician
(231) 832-2950 or karen.ickes@macd.org

Sponsored By:

Monsanto

Clare Conservation District

Michigan State University Extension
Hay Supply Abundant Across Michigan

Jerry Lindquist
MSU Extension

Though there were some extremely dry regions in the state of Michigan in mid-summer, hay crops across the state turned out good to very good in most areas, and the overall hay supply in Michigan is very abundant as the winter season approaches.

Much of the Southern region of the Lower Peninsula was approaching official drought declarations by the end of July. Areas in the northwest Lower Peninsula were dry for the second year in a row, and in some locations there, it was the third summer in a row.

Near the beginning of August, substantial rains of 4 – 9 inches were received in one week’s time in Southern Michigan ending the potential drought. The rest of the State also began receiving more rain in August and September, along with warm temperatures accelerating forage growth. Dry hay harvest during these months was challenging but many 3rd cuttings and some 4th cutting alfalfa harvests were successfully completed to make up for the short 2nd cuttings.

Many farms in Michigan had above average supplies of forage left over from the winter of 2015-16, and for the state, there was an average to above average yield for 1st cutting hay harvest in 2016 (even for those in dry areas of the state). These two factors have led to a very large supply of lower quality 1st cutting alfalfa grass mixed hays now available. Prices for those hays, especially in the round bale form which are the most abundant, have fallen to levels that are below the cost of production. MSU Extension Forage Team members estimate that it may be costing the average farm $80 - $90 per ton (depending on land costs) to produce these lower quality 1st cuttings in 2016. The Michigan market has some of that hay in the round bale form currently selling for under $70 per ton. It is a classic example of high supply and lower demand. Many farms trying to sell this type of hay will have above average carry over supplies again into the 2017 growing year unless the winter is unusually long and brutal.

As is normal, the 2nd and later cuttings of alfalfa hays, the mold and dust free quality horse hays, and the hays in square bale packages, either big or small square bales, are selling for more and are in higher demand. They are lower in price than what they were last year but many of them are still above $140 per ton and some are above $180 per ton.
Below is a quick Michigan hay market estimate as we enter the fall season of 2016.

<table>
<thead>
<tr>
<th>Type of Hay</th>
<th>Price Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; cutting grass round bale hay</td>
<td>$35 – 65/ton</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; cutting alfalfa/grass mixed round bale hay</td>
<td>$50 - $85/ton</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; cutting alfalfa/grass mixed large square bales</td>
<td>$70 - $120/ton</td>
</tr>
<tr>
<td>Dairy quality alfalfa/grass hays 125 – 150 RFV/RFQ</td>
<td>$100 - $170/ton</td>
</tr>
<tr>
<td>Dairy quality alfalfa hays above 151 RFV/RFQ</td>
<td>$160 - $230/ton</td>
</tr>
<tr>
<td>Horse quality square bales large or small</td>
<td>$170 - $270/ton</td>
</tr>
</tbody>
</table>

Anyone wishing to list hay for sale or seeking hay to buy may go to the Michigan Hay Sellers List at [http://web2.canr.msu.edu/hay/](http://web2.canr.msu.edu/hay/). The Hay Sellers List is sponsored by the Michigan Forage Council, Michigan Farm Bureau, and MSU Extension and is free for everyone to use. For more information contact Jerry Lindquist, MSU Extension Grazing & Field Crop Educator, at [lindquis@msu.edu](mailto:lindquis@msu.edu) or 231-832-6139 or Phil Kaatz, MSU Extension Forage & Field Crops Educator, at [kaatz@msu.edu](mailto:kaatz@msu.edu) or 810-667-0341.