BEEF CATTLE COMMENTS

VOLUME 24 NUMBER 1, May, 2015
Prepared by: Mike Baker, Beef Cattle Extension Specialist, Cornell University

Phone: 607-255-5923
Fax: 607-255-9829
E-mail: mjb28@cornell.edu
Web page: www.ansci.cornell.edu/beef/

1. EPDs – FORGET THE NUMBERS ................................................................. 2
2. COLOSTRUM PRODUCTS NOT CREATED EQUALLY – CHOOSE WISELY . 3
3. STOCKER CATTLE. IDLE LAND TO PASTURE LAND .................................. 4
4. CORNELL ALL FORAGE BULL TEST ............................................................. 5
5. MANAGE BALES IN FIELDS TO MINIMIZE STAND DAMAGE ................. 7
6. BQA UPDATE - PRECONDITIONING CATTLE IS ANIMAL WELFARE .... 8
7. INTRODUCING THE NYS BEEF FARM BUSINESS SUMMARY PROGRAM. 9
8. NYCG GRAZETTE ......................................................................................... 10
9. TO/DO MAY/JUNE ....................................................................................... 10
1. EPDs – FORGET THE NUMBERS

Now that I have your attention, let me explain my thoughts on using EPDs that simplifies the need to remember all of the values that are published by breed associations.

It is widely accepted that the Expected Progeny Difference (EPD) is the most valuable tool to make genetic progress. The research and practical application is clear. If your bull supplier doesn’t not have EPDs, move on to someone else.

There has been much written about EPDs and this time of year you can find many sources of information – just do an Internet search for “beef EPD” and hundreds of results will appear. I’ll leave this up to the reader to learn more about them. However, there are a few things you need to understand. First, EPDs are not a prediction of a given trait. For example a weaning weight EPD of 47 does not mean that you can expect an additional 47 lb of weaning weight. Second, EPDs are not transferable across breeds. So you cannot compare the weaning weight EPD of a Hereford to that of a Simmental. There is a conversion table that geneticists at the USDA Meat Animal Research Center develop each year (http://www.angus.org/Nce/AcrossBreedEpdAdjFactors.aspx) that allows you to adjust EPDs so that you can compare across breeds, but they are not directly comparable.

Due to the explosion in the number of EPDs for single traits, many breed associations have developed economic indexes. An EPD index combines several EPDs into one single economic value. A good explanation of EPDs and indexes is provided by Donna Lofgren, Purdue University http://www.ansc.purdue.edu/ibep/faq/epd-index.htm. Breed association websites are also a good source of information.

What I’d like to focus on is an easy method of comparing EPDs, whether for a single trait or for an index: percentile tables. Most breeds publish a percentile table which tells you where an animal ranks within the breed. The numbers go from 1 to 99. A bull that has an EPD or Index in the 10th percentile tells you that he is in the top 10% of the bulls in the breed for that trait.

Below are the EPDs for a SimAngus sire and the percentile table for SimAngus bulls. Note that you must use the Hybrid Simmental table as this is a SimAngus bull, not a purebred or full bred. Also if the breed association publishes tables for non-parent bulls (yearlings with no progeny) use that table to rank yearling bulls. The Simmental association gives you the percentile when you search for specific animals. If that is not provided you should have the percentile table available, so that you can find where the animal ranks. For example, this bull has a calving ease (CE) EPD of 10.2. Using the table, I know that he lies somewhere between the 50th and 55th percentile. This means that I probably would not want to use him on first calf heifers. Looking at the indexes, All Purpose (API) and Terminal (TI), he has a value of 139 and 82, respectively. Using the table he is in the top 25% of the breed for API and slightly above the top 10% for TI.

You also see Accuracy (ACC) listed. As this is a young sire with few progeny, his accuracies are low, meaning that the values are likely to change-this will be true for all yearling bulls. An older bull that has been used extensively and has many progeny will have an accuracy of 0.80 and above.

Trying to make sense of all of these numbers is difficult. By using a percentile table, I can look at the EPD of interest, find it in the percentile table and then determine if he will make the genetic
change I want in my herd. EPDs and Indexes are extremely valuable and are the best tools available to make genetic progress. The percentile table helps you in sorting bulls and all the data that is available.

For further assistance, go to the websites of your breed association and/or semen supply companies.

<table>
<thead>
<tr>
<th>SMAN SIRE EPD</th>
<th>CE</th>
<th>WW</th>
<th>YW</th>
<th>Milk</th>
<th>Doc</th>
<th>CW</th>
<th>YG</th>
<th>Marb</th>
<th>BF</th>
<th>REA</th>
<th>Shr</th>
<th>API</th>
<th>TI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPD</td>
<td>10.2</td>
<td>75.8</td>
<td>119</td>
<td>22.9</td>
<td>12.6</td>
<td>43.5</td>
<td>-0.1</td>
<td>0.61</td>
<td>-0.01</td>
<td>0.56</td>
<td>-0.22</td>
<td>139</td>
<td>82</td>
</tr>
<tr>
<td>ACC</td>
<td>0.21</td>
<td>0.31</td>
<td>0.4</td>
<td>0.18</td>
<td>0.12</td>
<td>0.28</td>
<td>0.21</td>
<td>0.23</td>
<td>0.24</td>
<td>0.22</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>55</td>
<td>10</td>
<td>10</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>90</td>
<td>15</td>
<td>80</td>
<td>60</td>
<td>75</td>
<td>25</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2015 Hybrid Simmental Percentile Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>35</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>55</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>95</td>
</tr>
</tbody>
</table>

2. COLOSTRUM PRODUCTS NOT CREATED EQUALLY – CHOOSE WISELY

A newborn calf has essentially no ability to fight disease. To build its immune system it must consume colostrum (first milk) from its mother. Colostrum contains immunoglobulins or more specifically immunoglobulin G (IgG) that move across the intestinal wall to build immunity. Known as passive transfer the calf’s ability to absorb IgG rapidly declines to nearly 0% at 24 hours of age. This is why it is so important that a calf nurses within a few hours of birth. In addition to building immunity, colostrum is a source of protein, energy, vitamins, minerals and natural growth promotants.

While it always preferable for the calf to get colostrum from its dam, there are situations where the quantity of maternal colostrum is insufficient, is of low quality or not available. In these situations commercial colostrum products can be substituted. However not all colostrum products are the same. Colostrum products are made from either blood serum or dried bovine colostrum. Whether made from serum or dried bovine colostrum does not seem to effect the efficacy of the colostrum product.

There is a difference, however in whether the colostrum product is intended as a supplement to or as a complete replacement of maternal colostrum. Supplements typically contain 40 g – 60 g of IgG per dose. Some research has indicated that supplements actually reduce absorption of maternal
colostrum. As such colostrum replacers have been developed. Colostrum replacers provide at least 100 g of IgG per dose. Research suggests that a calf should consume at least 100 g of IgG within 4-6 hours of birth; however due to the variable efficiency in absorption of IgG, dosages of 150 g – 200 g of IgG are recommended to ensure calf health.

It’s important to read the label to determine if you are purchasing a supplement or replacer. This is sometimes indicated in the name: supplement or replacer, but also in the amount of IgG per dose. If less than 100 g IgG/dose it is a supplement; greater than 100 g IgG/dose it is a replacer. Note that some supplements can be used as a replacer by increasing the amount of powder used to provide the 100 g IgG/dose.

Colostrum replacers are more expensive but several studies have shown that these products elicit the same response in calf health as good quality maternal colostrum. Given the high price of calves, investment in the best colostrum replacer resulting in a healthy calf is a good return on investment.

3. STOCKER CATTLE. IDLE LAND TO PASTURE LAND

( Editor’s note: The last few issues of Beef Cattle Comments (http://beefcattle.ansci.cornell.edu/) have had articles on Stocker Cattle. Given the availability of idled land that could be used for stocker cattle, I have reprinted an article here written by Nancy Glazier, Small Farms Specialist, NWNY Dairy, Livestock, and Field Crops Team which addresses the issue of accessing and improving idled land.)

Over 2.9 million acres of vacant land lay idle, waiting for an opportunity. Some is abandoned farmland, some is residential vacant land over 10 acres, some is not categorized in a 2005 Rural Landowner Survey. Not all of this land should grow corn! Maybe grazing is the better fit.

Access: Whose is it? The first step is to find out who owns the land. Start with asking neighbors. Explain what you would like to do – graze livestock, not build a house. If that leads to a dead end, check the tax maps with the local town clerk. Once you find out who the property owner is, take them a pound of your ground beef or a dozen eggs to break the ice. What may sweeten the deal is explaining the benefits of agricultural land assessment and what that would mean to their property taxes.

Get it all in writing Time and effort is involved in setting up a grazing system. Make sure it is spelled out who installs the fence, where electricity comes from for the fence and the water source, to name a few points. If you install items and the lease ends, make sure you spell out who gets the hard ware. Spell out what happens if the landowner dies during the duration of the lease. You probably want a lease for at least 3-5 years.

Fence Fencing serves two purposes: to keep livestock in and keep predators out. This is no place to skimp since these animals are not in your backyard. You don’t want a call in the middle of the night that your livestock are out. The least expensive way is to have the landowner pay for installation. That way the fence stays where it is if the lease is terminated. Another option would be for the cost share for fencing. Make sure you plan where the power is coming from; from a meter on the pole or the landowner. Another option is to install it yourself. Use good quality fenceposts and pay particular attention when installing corners, ends and gates.
**Forage quality** This may need some work. My first recommendation would be to soil test, but it may be easier to take a sample after the pasture is brush hogged. Lime as needed, but don’t try to apply more than 2 tons/acre if you are not plowing it down. Remember the benefit of this whole system is to keep costs down. Give the pasture 2 or 3 years before you decided to renovate. If fertility is really low, you may need to fertilize at recommended rates.

Livestock are a great way to improve pastures as well. New, lush growth provides a salad bar. They will eat what they like and leave the rest. You may need to clip or mow pastures to eliminate some weeds, such as goldenrod. The best time to mow for weed control, specifically goldenrod is full bloom. When weeds are controlled, sunlight will reach the ground and some of the grass seeds in the seed bank will germinate. Tap into them and give them a chance before you decide to reseed. And remember, it may take a few years to reach your optimum carrying capacity.

Rotation is essential for pasture improvement. The shorter residency period the better for forage production. When livestock graze for more than a day, they will go back and graze the nice, soft regrowth. Ideally, cattle should be moved every 3 days, but that’s not always practical. Move them to a new paddock as often as possible, to fit your schedule.

**Water** Water is the cheapest nutrient. Your animals will need a sufficient supply of clean water. Is there a pond or spring that could be developed? Livestock can drink from a pond or creek with limited access. Will the neighbors let you run a hose? Maybe a water wagon is the best option for the location. You may need a portable tub that moves with the livestock.

**Cattle handling** You will eventually need to catch those critters after a time on pasture, whether it’s to move or sell the livestock or treat a sick one. Cattle need to be used to it and not frightened by it. One grazer brings his cattle through his corral every time he moves them. That may be more than necessary, but think about that. It could be a moveable or temporary facility.

There are many grazers that have implemented this system. You may want to start small and learn from the experience!

-Nancy Glazier, Small Farms Specialist, NWNY Dairy, Livestock, and Field Crops Team, 585-315-7746, nig3@cornell.edu.

---

**4. CORNELL ALL FORAGE BULL TEST**

Nancy Glazier, Small Farms Specialist, NWNY Dairy, Livestock, Field Crops Team

The second weigh period concluded March 11 for the Cornell All Forage Fed Bull Test. The 25 bulls continue to do well. There was less snow and ice!
<table>
<thead>
<tr>
<th>FarmID</th>
<th>CUID</th>
<th>Last name</th>
<th>BW¹</th>
<th>BW</th>
<th>pADG²</th>
<th>cADG³</th>
<th>Breed</th>
<th>Pen</th>
<th>WDA⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>G17</td>
<td>1517</td>
<td>Chedzoy</td>
<td>484</td>
<td>507</td>
<td>572</td>
<td>2.33</td>
<td>1.58</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>O07</td>
<td>1518</td>
<td>Chedzoy</td>
<td>410</td>
<td>436</td>
<td>465</td>
<td>1.03</td>
<td>0.98</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>P24</td>
<td>1519</td>
<td>Chedzoy</td>
<td>364</td>
<td>401</td>
<td>450</td>
<td>1.75</td>
<td>1.54</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>B08</td>
<td>1520</td>
<td>Chedzoy</td>
<td>396</td>
<td>439</td>
<td>490</td>
<td>1.82</td>
<td>1.68</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>25</td>
<td>1521</td>
<td>Moultrup</td>
<td>484</td>
<td>518</td>
<td>582</td>
<td>2.26</td>
<td>1.75</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>46</td>
<td>1522</td>
<td>Moultrup</td>
<td>574</td>
<td>605</td>
<td>651</td>
<td>1.65</td>
<td>1.37</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>5804</td>
<td>1524</td>
<td>Callahan</td>
<td>730</td>
<td>770</td>
<td>822</td>
<td>1.85</td>
<td>1.65</td>
<td>AN</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>1525</td>
<td>Lucenti</td>
<td>591</td>
<td>649</td>
<td>678</td>
<td>1.03</td>
<td>1.54</td>
<td>CH</td>
<td>13</td>
</tr>
<tr>
<td>4884</td>
<td>1506</td>
<td>Dennis</td>
<td>799</td>
<td>814</td>
<td>895</td>
<td>2.88</td>
<td>1.71</td>
<td>HP</td>
<td>14</td>
</tr>
<tr>
<td>75</td>
<td>1510</td>
<td>Ward</td>
<td>442</td>
<td>460</td>
<td>495</td>
<td>1.27</td>
<td>0.96</td>
<td>HP</td>
<td>14</td>
</tr>
<tr>
<td>1412</td>
<td>1511</td>
<td>Brubaker</td>
<td>657</td>
<td>733</td>
<td>810</td>
<td>2.74</td>
<td>2.74</td>
<td>AN</td>
<td>14</td>
</tr>
<tr>
<td>1406</td>
<td>1512</td>
<td>Brubaker</td>
<td>705</td>
<td>766</td>
<td>851</td>
<td>3.02</td>
<td>2.61</td>
<td>AN</td>
<td>14</td>
</tr>
<tr>
<td>1408</td>
<td>1513</td>
<td>Brubaker</td>
<td>670</td>
<td>718</td>
<td>789</td>
<td>2.54</td>
<td>2.13</td>
<td>AN</td>
<td>14</td>
</tr>
<tr>
<td>B4</td>
<td>1514</td>
<td>Engh</td>
<td>447</td>
<td>486</td>
<td>561</td>
<td>2.67</td>
<td>2.02</td>
<td>DE</td>
<td>14</td>
</tr>
<tr>
<td>B1</td>
<td>1515</td>
<td>Engh</td>
<td>540</td>
<td>578</td>
<td>643</td>
<td>2.33</td>
<td>1.85</td>
<td>DE</td>
<td>14</td>
</tr>
<tr>
<td>B6</td>
<td>1516</td>
<td>Engh</td>
<td>518</td>
<td>576</td>
<td>653</td>
<td>2.74</td>
<td>2.40</td>
<td>DE</td>
<td>14</td>
</tr>
<tr>
<td>514</td>
<td>1501</td>
<td>Hartman</td>
<td>511</td>
<td>543</td>
<td>580</td>
<td>1.30</td>
<td>1.23</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>414</td>
<td>1502</td>
<td>Hartman</td>
<td>578</td>
<td>622</td>
<td>687</td>
<td>2.33</td>
<td>1.95</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>914</td>
<td>1503</td>
<td>Hartman</td>
<td>495</td>
<td>543</td>
<td>622</td>
<td>2.81</td>
<td>2.26</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>214</td>
<td>1504</td>
<td>Hartman</td>
<td>486</td>
<td>499</td>
<td>574</td>
<td>2.67</td>
<td>1.58</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>814</td>
<td>1505</td>
<td>Hartman</td>
<td>469</td>
<td>497</td>
<td>557</td>
<td>2.13</td>
<td>1.56</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>1402</td>
<td>1507</td>
<td>Van Schaik</td>
<td>422</td>
<td>436</td>
<td>497</td>
<td>2.19</td>
<td>1.34</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>1401</td>
<td>1508</td>
<td>Van Schaik</td>
<td>445</td>
<td>469</td>
<td>543</td>
<td>2.64</td>
<td>1.75</td>
<td>AN</td>
<td>15</td>
</tr>
<tr>
<td>1403</td>
<td>1509</td>
<td>Van Schaik</td>
<td>471</td>
<td>513</td>
<td>566</td>
<td>1.92</td>
<td>1.70</td>
<td>AN</td>
<td>15</td>
</tr>
</tbody>
</table>

| Avg-all | 530 | 567 | 627 | 2.14 | 1.72 | 1.94 |
| Avg-pen 13 | 512 | 546 | 594 | 1.70 | 1.46 | 1.93 |
| Avg-pen 14 | 597 | 641 | 712 | 2.52 | 2.05 | 2.02 |
| Avg-pen 15 | 485 | 515 | 578 | 1.92 | 1.75 | 2.02 |

¹Body weight; ²Avg daily gain, 28 days; ³Cumulative avg daily gain; ⁴Weight per day of gain

All bulls are being fed the same diet of mixed mostly legume and grass hay crop silage. Average dry matter intake was 19.7 lb per day per bull, 3.2% of body weight.
The estimated DMI intake per bull was inputted into the Large Animal Nutrition System (LRNS) model. The model predicted the bulls to gain 1.38 lb/day at this level of intake.

Sammi Clark, Territory Sales Manager for Kent Feeds has again donated free-choice mineral for the duration of the test.

The test is being conducted at the Cornell University Ruminant Center in Dryden, NY, and will run for 140 days ending June 3. Next data collection is April 8. The purpose of the test is to develop and evaluate the performance and quality of young bulls on a forage diet. As the predominant feedstuffs used in a cow/calf operation is forage, the data collected will assist producers in selecting bulls raised in conditions similar to the environment under which they will be expected to perform.

For more information, contact Nancy Glazier, NWNY Small Farms/Livestock Specialist, 585-315-7746, nig3@cornell.edu or Mike Baker, Beef Extension Specialist, 607-255-5923, mjb28@cornell.edu, or visit the Cornell Beef Management Website, http://beefcattle.ansci.cornell.edu/.

5. MANAGE BALES IN FIELDS TO MINIMIZE STAND DAMAGE

After the final cutting for the year, it doesn't matter much if hay bales and stacks set on cut fields for a while. But when more harvests are expected off that field, delaying removal can be harmful, says Bruce Anderson, University of Nebraska agronomy professor.

Writing on beef.unl.edu/, Anderson says plants underneath often are killed if covered for more than a week or two, providing a great starting place for weeds.
Most of the damage, however, is due to wheel traffic on the regrowth. Studies show that when fields are dry, plants driven on before regrowth occurs yield about 5-7% less at next cutting.

Even worse was waiting to remove bales. Just seven days after cutting, when regrowth shoots had started to grow, yield was reduced by more than 25% and survival of these plants also was less.

Worst of all is removing bales when fields are wet, as wheel traffic causes much more compaction, with yield loss typically exceeding 30%.

These studies emphasize the benefits of baling and removing bales from hay fields as quickly as possible after cutting, as well as minimizing driving on wet soils. They also suggest that following the same trail when removing bales or stacks from fields can reduce losses from wheel tracks by limiting the total area damaged.

Hay fields must be driven on, of course, to remove bales after harvest. But you can lessen damage by controlling where, when and how often you drive.

-Bruce Anderson, University of Nebraska-Lincoln

6. BQA UPDATE - PRECONDITIONING CATTLE IS ANIMAL WELFARE

Preconditioning of feeder cattle to prepare them for movement to the next enterprise is an important BQA principle. First and foremost it is an animal welfare issue. Cattle that are sold direct off the cow without any preparation is a stressor that puts them at greater risk of getting sick. Cattle that get sick require antibiotics, which the beef industry is trying to reduce relative to expense, resistance and consumer perception. Additionally, it’s been well documented that cattle that get sick don’t perform well in the finishing phase and have reduced carcass quality. On average around 2-4% of cattle die post weaning. This could be cut drastically if these cattle has been properly prepared for the next phase off the cow.

Preconditioning consists of three management practices that work together to reduce stress thereby increasing the immune status of the young calf.

1. **Vaccination/health management.**
   a. Vaccines assist the calf in fighting diseases that are for the most part resident in the animal itself – though many of them are contagious and can be spread between animals. Building immunity begins with assuring the calf gets colostrum from a well vaccinated dam. Cows that are not vaccinated will not have the same level of immunoglobulins as vaccinated cows. At a minimum cows should be vaccinated for IBR, PI3, BVD, BRSV and Leptospirosis. At a minimum calves should be vaccinated for:
      i. IBR, PI3, BVD, and BRSV
      ii. Mannheimia haemolytica
      iii. Pasteurella multocida
      iv. 7 Way Clostridium
   b. Additional vaccines to consider would be:
      i. Histophilus somnus
ii.  Lepto 5
   c.  Internal & external parasite control. Calves that are burdened by parasites have a reduced immune system.
   d.  To assure the most effective immune response calves should be boostered (if required) at least 30 days prior to movement. If killed vaccines are used, they require a booster. If not boostered, then they are worthless.

2.  **Weaning.** Separation from the dam is a high stress event. Therefore if the immune system is not prepared as described above, disease causing viruses and bacteria have a much easier time overcoming animal health. Low stress weaning practices such as fence line weaning have shown some success in reducing stress.

3.  **Nutrition.** Calves that have had only mom’s milk, grass and water out of a pond are further stressed when they are expected to eat stored forage, grain and drink water from a tub. Ideally transitioning calves to their new diet occurs prior to weaning. Preconditioning is not only good for the calf and good for the pocketbook, it is the right thing to do. As BQA producers, this practice should be as common place as checking fence and feeding your cows.

7.  **INTRODUCING THE NYS BEEF FARM BUSINESS SUMMARY PROGRAM.**

Sandy Buxton  
518-380-1498  
Sab22@cornell.edu

To help beef producers, large and small, whose numbers are growing across NYS, Cornell University and Cornell Cooperative Extension are working with customized software developed by the University of Minnesota to help beef farms analyze their financial and production numbers.

The new project which will help beef producers understand and use data to make business decisions is currently spreading across New York State. The Beef Farm Business Summary program is modeled after work done for years with dairy farmers to help them improve their businesses.

The final personalized report is designed to help quantify and identify strengths and weaknesses on the farm as well as cost of production. This information is also valuable to assist farm managers in choosing market channels that optimize income.

Much of the starting information farms already have: animal numbers and ages, income and expense info for taxes, list of equipment or other assets as well as liabilities. If the farm harvests crops to feed the animals or to sell, that would be more data needed.

While many beef farms are not designed to provide full-time income streams, the information is no less valuable since producers require the data this software can generate to identify strengths, weaknesses and opportunities on the farm.

No one wants to subsidize their customers. Knowing cost of production makes it more likely the farm will sell into market channels where the income received will at least cover expenses.

Additionally, producers would also be able to see how their production system stacks up for return on investment, yield per acre and others. Whether selling feeder calves, backgrounded, off grass, breeding stock or conventionally finished cattle, the information and numbers generated by the process and the resulting report will provide a new view into the activities of the farm.

For more details on the NYS Beef Farm Business Summary or to find an educator to help, please call your local Cornell Cooperative Extension office or contact Dr. Mike Baker, Cornell University 607-255-
8. **NYCG GRAZETTE**  
Karen Hoffman, NRCS Grazing Specialist

**Pasture Management Tips:**

*(Editor’s note: While Karen writes about dairy cattle, the concepts are the same for the beef herd).*

Since transition to pasture always seems to be challenging for some, we always have the same (or similar) pasture management tips in April every year. Dairy farmers need to be especially careful about transitioning, or milk production may take a hit. Remember that switching from stored feeds to pasture is like changing silos - the rumen bugs need time to adjust to a higher quality feed. Even other kinds and classes of livestock need to make the shift, but you don't generally see the effect of no transition time causing lower production - they usually make up the difference in growth later in the season.

Best bets are to begin the transition before the grass really starts to grow rapidly – generally before it reaches 6 inches in height. If the ground is so wet that they'll sink up to the hocks, you may want to wait a little longer, or find a paddock where the ground is drier to start on. Transitioning at the shorter height sets up your "grazing wedge" - in other words, it begins the process of getting the grass staged to be grazed at the right height throughout the grazing season. If you wait to turn out until it's 6 to 8 inches tall, you've set yourself up for a lot more clipping or haying, because the animals will never catch up with it. The shorter starting height also limits intake, and so helps the rumen bugs adjust over the first week or two on grass.

The one caution with early spring transition to grazing is to not overgraze your pastures. The plants will initially grow from stored nutrients, but if overgrazed those nutrients are depleted quickly, the plants will lose their root mass, and will take longer to regrow. Leave enough leaf area for the plants to continue photosynthesizing, which usually means a short residency period or what is sometimes called “flash grazing” - this restricts the animals ability to graze it too short. It’s a delicate balancing act in the spring, and requires observation and the ability to change grazing strategies quickly. In other words, this is where the art is needed in the application of the science of managed grazing!

**The NY Grazing News is now available on the web!**


9. **TO/DO MAY/JUNE**

   a) Vaccinating cows for IBR, BVD, BRSV, PI3, and Leptospirosis is an important part of an effective herd health program. Consult with your veterinarian about using modified live vaccines on open cows prior to breeding your cowherd.

   b) Get ready for breeding season:

      - If you use A.I. order semen and check your equipment. Be sure breeding corral is in working order
- If breeding naturally, make sure you have enough bulls: 10-15 cows per yearling bull; 20-25 cows per 2-year old bull; 30-35 cows per mature bull.
- Have phosphorous source in form of free-choice mineral mix; phosphorous is important for maximum fertility.
- Yearling British heifers should weigh a minimum of 700 lbs. and continental heifers a minimum of 750 lbs. before being bred.
- If lactating cows are thin and not cycling, feed more energy.
- Vaccinate open cows for IBR, BVD, PI3, BRSV, and Leptospirosis. Consult your veterinarian for additional health information.

c) Breed heifers one heat period before the cows. This provides extra time for heifers to recover to calve with the cow herd the following year.
d) Take advantage of early summer grass. Turn cows in when grass is 4-6 inches tall, graze intensely for 7 days and then rotate to another field. Pasture should be rested 25-40 days before grazing again.
e) Is hay making equipment ready? For highest quality, first cutting should be started by end of May to early June, depending on species and location.
f) After first cutting or grazing, consider fertilizing with nitrogen to maximize aftermath growth.
g) If you vaccinate for pinkeye, do so six weeks prior to fly season. In other words, it may be too late to get effective pinkeye control through vaccination.
h) Fly control methods include sprays, backrubbers, insecticidal ear tags, and dust bags. Feed through fly control is not recommended. Insecticides that kill fly larvae also kill beneficial insects such as dung beetles that are necessary for natural control and manure decomposition.
i) Continue to monitor body condition of first and second calf heifers. If they drop below 4.5, they should receive supplemental nutrition.
j) The breeding season should last no more than 60 days. Make plans for keeping bull separate before and after the 60 day breeding season.