AG FOCUS



Are You Ready for Direct Market Meat Sales? by Nancy Glazier

Covid-19 has brought us to a different world. With it came its share of challenges, but also opportunities. Several factors have led to increased demand for local meat. Are you ready? Here are a few points to think about.

A lot depends on species. The holiday lamb and kid markets have taken a big hit. Easter, Passover, Ramadan have passed. Fewer buyers were at auctions to purchase. Have you found other options? Pooled with others to sell or ship elsewhere?

Poultry. Get your orders in quickly for meat birds or egg layers. Anecdotal reports are the local feed stores are selling out quickly of birds. Many backyarders are looking to raise their own.

Cuts vs. custom. This depends on where you get your meat processed. Custom sales sell shares of live animals as USDA inspected allows you to sell retail cuts. Spring is usually a slow time of year for many small processors. As of April 7, these spring slots for harvest are filling up. Call as soon as you can if you have animals ready. Depending on your processing date, you may need to change the diet to meet your goal for market readiness. Also, we are transitioning to grilling season and cut preferences shift. Think steaks vs.

Make sure your animal has reached the correct degree of finish. There are lots of videos online to assist with this decision. One is Determining the Market Readiness of Beef Cattle, by beef cattle extension specialist Mike Baker. You can search for the title to find or let me know and I can send you the link to it and others. There is a spreadsheet to estimate the finished weight of cattle. I can send that along as well.

I have also spoken with some farmers who operate community supported agriculture (CSA) sales and they are looking for additional meat products. These are pre -ordered boxes or bundles that are available on a regular schedule. If your production practices are similar, you may be able to sell to them. Consider working with a vegetable CSA (community supported agriculture).



A cut of beef. Photo Source: Pixabay.com

Or, check with produce farms, they might possibly be interested in adding meat.

Many farms have an online presence through websites, Facebook, and others. One option is MeatSuite (meatsuite.com) and has been around for several years. Local Harvest (localharvest.org) is another site to list your farm's meat (or other products). The key is to keep track where you are listed and keep your listings up to date.

Direct online sales have increased dramatically. A means for orders with payment options needs to be in place – website, Facebook, etc. There are procedures to follow to ensure proper shipment. There are reports that shipping times have increased a bit, so that needs to be kept in mind. There are many resources out there; the Niche Meat Processors Assistance Network recently held a well-attended webinar on the subject, Farm to Freezer: The Logistics of Online Sales & Shipping Meat. The recording is on their website.

Farmers markets are another way to sell. This is time consuming, but may be a good outlet. Some farms open on-farm stands or just a freezer in the garage or backroom.

These are just a few thoughts. With all these options make sure you manage inventory. My guess is the local foods movement will keep moving forward. As always, let me know if you have any questions.

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A reproductive research update

Paul Fricke, University of Wisconsin-Madison Sponsored by Neogen

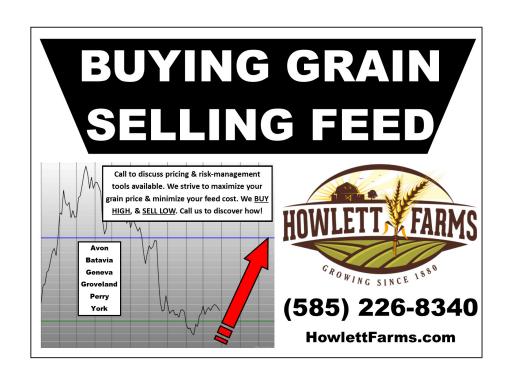
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Are You Ready for Direct Market Meat Sales? by Nancy Glazier1 **Examining Reduced-Lignin Alfalfa for Increased** Forage Quality, Digestibility & Cow Performance by Jodi Putman5 Stressed Out? Think Like a Seal by Timothy X. Terry7 Are You Milking Some Cows You Shouldn't Be? by J. Petzen, J. Hanchar & A. Novakovic9 **Preparing your Planter for the Season** by Ali Nafchi10 Potential Pitfalls of Growing Soybean after Soybean by Mike Stanyard12 Heifer Immaturity Keeps Her from Being All She Could Be by Margaret Quaassdorff13

Inside This Issue





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Page 4 AG FOCUS MAY 2020

Examining Reduced-Lignin Alfalfa for Increased Forage Quality, Digestibility and Cow Performance by Jodi Putman

The reduced-lignin HarvXtra alfalfa trait has been an option for growers for four years now. In terms of evaluating a crop trait of any kind, four years on the market isn't long, especially for a perennial crop like alfalfa. It is long enough for some growers to draw conclusions and perhaps generate additional questions. "There has always been an inherent dilemma of trying to balance alfalfa yield with forage quality, as yield increases, the digestibility of alfalfa decreases because, as the plant matures, the amount of lignin content in the stem increases," says JD Pankow, a third generation dairy farmer of Castile, New York.

In dairy production, feed is the most expensive component, typically representing 50 to 70% of total milk production costs. The proportion of feed costs as a share of total production cost is highly dependent on feeding systems, which greatly vary worldwide. Feed costs are driven by the availability of feeds, feed prices, and diet composition. "Producing a higher quality forage with better digestibility, would mean we can significantly reduce our purchase costs of imported commodities that are used in our dairy rations," says JD. In 2019, we grew 35 acres of HarvXtra next to a conventional alfalfa stand. Visually, the HarvXtra had a better leaf to stem ratio, whereas the conventional showed more stem and was almost "straw like" according to JD.

The HarvXtra fields were harvested the same as the conventional yet the total fiber (acid detergent fiber) values made it look like the HarvXtra had been cut at 5-10 days less maturity (36% ADF vs. 41% on the conventional).

Alfalfa height at optimum mixed stand NDF 35 35 Alfalfa Height, Inches 30 25 25 20 20 15 15 NOTE: Goals for standing forage, assuming 10-15% decline in forage quality due to harvest, silage storage and feedout. 10 10 20 60 80 100 % Grass Source: www.forages.org

Next, the lignin was only 16.5% of the total fiber in HarvX-tra vs. 18.4% in the conventional, leading to around 10% more of the fiber that will be digested by the cow and not passed through (43.5 % NDF undigestible at 240 hrs. in the HarvXtra vs. 53% NDF undigestible at 240 hrs. in the conventional). Overall, JD said that based on the Cumberland Valley Analytical Services and conversations with his dairy nutritionist, the HarvXtra was noticeably more digestible and of higher quality. Based on these preliminary results the farm aims to transition conventional alfalfa fields to a reduced-lignin alfalfa variety for improved forage quality, digestibility and cow performance.

To help producers capture optimum forage quality during first cutting, I will be out measuring alfalfa height to predict Neutral Detergent Fiber (NDF) for alfalfa, alfalfa-grass mixtures and grass stands in several fields across the 9 counties. Field locations will reflect the diversity of heat, elevation and soil moisture in the area. In general we say 100% grass stands should be cut when nearby alfalfa is 14 inches tall to achieve the desired 50% NDF. Producers should begin cutting 50/50 mixed alfalfa and grass stands when nearby alfalfa is 22 inches tall for the desired 44% NDF. Producers should begin cutting 100% alfalfa stands when alfalfa is 28 inches tall for desired 40% NDF.



Measuring alfalfa height.

Photo: J. Putman / CCE NWNY Team



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Page 6 AG FOCUS MAY 2020

Stressed Out? Think Like a Seal by Timothy X. Terry, Harvest NY

Everyone knows that the U.S. Navy SEALS are an elite fighting force, and recognized the world over for their exploits. The training they undergo is rigorous and demanding. In fact, only about 1 in 4 (25%) of trainees actually complete the training. While this does make sure you get the best of the best, it may also mean that many otherwise good candidates were falling short. The Navy was not satisfied with this figure, and after some review determined the problem was not one of physical strength but rather of mental stamina. In response, the Navy introduced the "Big Four" (listed below) to develop the mental stamina needed to complete the training and succeed on the battlefield. Following institution of this program the success rate rose to 1 in 3 (33%).

Given recent events I felt you might benefit from a little psychological boost. So here are the Big Four so you, too, can think like a SFAL.

1. Goal Setting – This is taking the SMART goals and breaking them down into smaller achievements. SEAL trainees

often use this technique to survive the intense training – first make it to lunch, next, make it through to dinner.

In practice it might look like this: take a big goal and break it down into manageable micro goals. Then use the achievement of each micro goal to launch yourself into the next one.

2. Mental Rehearsal — Some might also call this visualization. You're mentally working at something over and over until it becomes a natural part of you and is ultimately easier to execute in dire situations. All SEALs are trained to pass the Underwater Competency Test where instructors "attack" trainees outfitted with scuba gear by ripping off their masks, tying knots in their air hoses, shutting off their air tanks, rolling them along the bottom, etc. all so they can survive a terrifying, real-world, underwater situation in some far-flung corner of the world. (You might argue that that sounds like a normal day at the office for you with intrusive government regulations, lost milk markets, ICE raids, personnel issues, COVID-19...)

3. Self-talk — You know, that inner voice that may go into panic mode whenever the sh** hits the fan. Experts say this little voice can speak 300 — 1000 words per minute (#auctioneer) and there's no shutting him up. The trick here is to change the narrative.

Over four hundred years ago, Michel de Montaigne (1533-1592) said: "My life has been filled with terrible misfortune; most of which never happened." More specifically, recent research has shown that about 85% of what we worry about never happens, and 12% of the remaining 15% was not as bad as anticipated and/or we are able to grow or learn something from it. In other words, 97% of what we worry about is just that small

inner voice freaking out and bombarding us with exaggerations and misperceptions – sounds like Social Media, doesn't it? Instead, replace these false alarms of panic and catastrophe with a focus on what needs to be done right now, and follow it up with whatever is the next right thing to do.

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4. Remain calm – Stay cool and focus on your breathing. Granted, that second part might be a little difficult to do when you're twenty feet underwater, but for us land lubbers the combination of the two can be truly powerful.

A little apprehension is not necessarily a bad thing. It makes you alert, ready for action, and kicks your spideysenses into high gear. However, excessive anxiety raises stress hormones which have been associated with hypertension, premature aging, cancer, depression, and shrinking brain mass leading to dementia and Alzheimer's Disease, just to name a few.

It may sound a little hokey, but take just a minute or two to back away from the situation, take several deep breaths and then approach it with, or from, a different perspective.

Yes, these may not be your default responses to difficulties, but with practice these are habits you can learn.





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Page 8 AG FOCUS MAY 2020

Are You Milking Some Cows You Shouldn't Be?

by Joan Sinclair Petzen, John Hanchar and Andrew Novakovic

The information in this article has been condensed, the full article is available at: https://nwnyteam.cce.cornell.edu/submission.php?id=992&crumb=business | 9

In a suddenly changed price environment, where the all milk price projected in the World Supply and Demand Estimates from USDA (https://www.usda.gov/oce/commodity/wasde/) dropped by \$3.90 per cwt. from their March to April 2020 report. Managers need to make decisions to preserve cash and meet their financial commitments. To guide decision making, consider reviewing resources available from Pro-DAIRY including: publications, podcasts, and webinars; to spark discussions with your management team for responding to COVID-19.



Management Strategies during COVID-19

https://prodairy.cals.cornell.edu/publications/covid-19/

Publications

- Ten Key Herd Management Opportunities on Dairy Farms During Low Margin Times
- Do's and Don'ts for Dairy Farmers When Facing Financial Difficulty
- Understanding Your Break even Cost of Production
- Diet and Management Considerations for Emergencies: Reducing Milk Flow Without Harming Cows and Threatening Future Production
- Herd Health Do's and Don'ts During the COVID-19 Pandemic
- Spring 2020 Contingency Planning
- Feeding Milk to Cows?
- Feeding Strategies During Challenging Times
- Progress of the Dairy Farm Report #3: Selected Financial and Production Factors

Podcasts

- COVID-19 Overview and Milk Distribution
- Feed and Nutrition Services
- Dairy Farmer and Farm Consultant Perspectives
 Animal Health Service Providers
- Essential Care of Cows and Equipment
- Milk Supply Chain Challenges
- Spring 2020 Contingency Planning
- Strategies for Reducing Milk Flow Safely and Feeding Milk to Cows

Webinars

- COVID-19 and Your Dairy
- Disruption to Key Personnel on the Farm: Developing Contingency Plans
- 2020 Corn Silage Strategies: New York and Vermont Hybrid Evaluation

History often provides good instruction when trying to size up an unfamiliar situation, shedding some light on current options. The 1984 Milk Diversion Program (MDP), created in a period of extraordinary surpluses and price pressure, sought to quickly and partially reduce milk production, over 15 months, by giving farms cash incentives to reduce production. This program is similar to what was recently proposed by the National Milk Producer Federation and International Dairy Foods Association.

Producers, who subscribed, quickly implemented plans to reduce their variable costs by changing rations and culling a few extra cows each month. Many found they needed to cull more cows than their plan called for to reach their reduced production goal. Today, each farm must take a hard look at each unit, cow, and determine whether that cow will cover variable costs and contribute to supporting fixed costs.

Changes do not need to be drastic. Maybe a little more disciplined approach to decision making increases the likelihood of success.

- Evaluate each cow before you invest in dry treatment or another straw of semen.
- Determine each calf's potential and choose which ones to raise.
- Take a hard look to be sure you are getting the most bang for the buck from your ration.

Eventually, markets will reopen and sales will return. In the meantime, easing back on the throttle in how we manage cows and how many cows we keep could be good strategies for the current situation.

Preparing Your Planter for the Season by Ali Nafchi

In crop production, proper planting is very critical. In a perfect world, seeds are planted into seedbeds using advanced planters that can address all the variabilities in a field. However, regardless of the technology level in the planter you use, it needs to be properly maintained and adjusted. Here are a few things to consider when preparing your planter before planting that can improve stand uniformity and increase yield.

- √ Level the Planter. This is relatively easy to do and can improve down pressure and seed depth uniformity.
- V Check Bushings and Parallel Linkage. The parallel linkage maintains a level row unit and keeps it running smoothly. Check each unit for wear in bushings, bolts and linkages. Stand behind the row unit and wiggle it up and down, from side to side, checking to make sure bushings are tight. If there is any play in the row unit replace the bushings. Worn bushings increase row bounce, increases seed bounce and can change the depth of seeding.
- V Drive System. Check tires' air pressure, and every drive chain. A preseason check for a kink or a rusty chain as well as daily maintenance and lubrication of chains during the planting season is very important. Check all chains including the transmission, the drive system, and the meter, give them a spin to make sure they spin freely. Kinked chains cause shock and vibration in the meter.
- V Calibrate Corn Meters. On finger units, check brushes, fingers, springs, back plates and seed belts for wear. On air or vacuum planters check brushes, gaskets and disks or drums for cracks or wear. Replace all worn parts. To calibrate your planter's metering system, check the book for the setting and drive combination for a targeted seeding count. For an accurate seed counting in the field, adjust the press wheel for a minimum contact and set the depth controller to 0-0, letting the seeds barely lay on top of the ground for a better counting. Count the seeds in 13 foot and nine inches for a 38in row spacing planter or 13 foot and one inch for a 40in row spacing planter to find out the actual seating rate.
- V Double Disk Openers and Depth Wheels Double Disk Openers. A worn disk opener can change the shape of the seed channel and the ability of the seed to stay in place at the bottom of the trench. Check the recom-

- mendations on when it is critical to change disk openers. In general, the disks must be replaced when they lose 1/2 inches in diameter (Fig. 1). Check for spacing between disks by sliding a business card from the top down along the front of the disks until the card will not lower any further. Mark that spot with chalk. Then, take the card from the back and slide it forward until it stops. Mark that spot and measure the distance between the two marks. If it is less than two inches, adjust or replace the disks.
- V Depth wheels. Check rubber tires for cracks and wear. Wheels should run tight against double disk openers to ensure seed furrow does not collapse. Reduced inner diameter gauge wheels help to reduce sidewall compaction in wetter conditions such as reduced or no-till.
- V Seed Tubes. Inspect seed tubes for wear at the bottom. If the tubes have a small dog ear flap on the left side of the seed tube, turn constantly. They should gently turn sporadically, especially through areas of thick residue.

(Continued on page 11)



Page 10 AG FOCUS MAY 2020

Preparing Your Planter for the Season

(Continued from page 10)

- √ Closing Wheel System. When pulling your planter on a hard surface, check the mark left behind the planter by the double disk openers. The mark should run right down the centerline between closing wheels. If a closing wheel is running too close to the mark, adjust the closing wheels to bring it back to center. Consider an alternative to rubber closing wheels. The spike wheel can help chop the sidewall improving fracturing and sealing in the tough soil conditions. For no-till, an even more aggressive approach may improve trench closing. Two 13" spike wheels with a drag chain provide the most aggressive action.
- V Row Cleaners. Check the row cleaners, they do not move the soil, they should just gently sweep the residue. Almost any planter can benefit from well-adjusted row cleaners especially in the fields with higher levels of residue. Sweeping residue from the row, may lead to a warmer soil around the seed trench, reducing wicking and seedling blight.

√ Down force. Down force is critical and has big impact on depth that correlates to uniformity and yield especially for high-speed planting.

Checking your planter over for some of these basic things can help your machine to plant more uniformly.

Brand of Planter	New Disk Diameter	Replace if Less Than
Case/IH 400	13 ½ inches	13 inches
Case/IH 800, 900 & 1200	14 inches	13 1/2 inches
JD 7000, 7100, 7200, 7300, 1700 & ProSeries	15 inches	14 1/2 inches
White 5100	13 1/2 inches	13 inches
White 6000	15 inches	14 1/2 inches

Figure 1. Recommendations on changing the disk openers.

References:

Stand Uniformity - Michigan State University Successful Farming

Creating Consumer-Friendly Bulk Meat Sales

Free Online Workshop - Two dates to choose from: May 4 or May 13, 2020 at 7:00pm

The situation facing us today is challenging. While conventional markets for livestock have cooled as large processors slow down production or temporarily closes, NY farms are faced with a unique opportunity to market meat directly to the consumer. This workshop is designed to equip the producer with clear and simple steps towards making bulk meat sales, such as quarters, halves, and mixed-cut bundles. We'll cover "how to" tips to help you get started quickly. Join Ag. Marketing Consultant, Matt LeRoux, for this online workshop that covers understanding the consumer, pricing, product formats, and reaching consumers.

About Matt: Matt has nearly 20 years' experience serving farms through Cornell Cooperative Extension, nonprofits, and consulting. Specializing in market strategy, Matt works with a diverse mix of produce and livestock farmers and food businesses. Career highlights include developing the Marketing Channel Assessment Tool for produce growers and the Cornell Meat Price & Yield Calculator.

To Register for the May 4 workshop visit:

https://cornell.zoom.us/meeting/register/tJEodO6prDopG9bmabdN8uMnWIl3ztkAud-B

To Register for the May 13 workshop visit:

https://cornell.zoom.us/meeting/register/tJUsf-qtrjwuHNXU8PKHStn0I6XF8XkdTPdf

After registering, you will receive a confirmation email containing information on how to join the meeting.

Funding for this program is provided by Beef Extension, Cornell Department of Animal Science



Potential Pitfalls of Growing Soybean after Soybean

by Mike Stanyard

I am getting quite a few questions about growing soybeans for a second year in a row. Most of this is due to the USDA forecast for a record U.S. corn planting in 2020 and \$3.00 corn at harvest. While second and third year soybean fields are planted every year, it is not a recommended practice. University research shows a range of yield loss from 0-10% for second year soybeans compared to a corn-soybean rotation. We know that weather plays a huge factor here and this potential loss can be even greater if the conditions are right. Those of you who have ever had a severe white mold infestation know what I am talking about!

If you intend to grow soybean after soybean, try to remember what issues you might have had last year. Think about nodulation, fertility, emergence, diseases, weed control and insects. These problems could be amplified in year two if you do not make the appropriate adjustments. Here are some considerations to think about to protect your potential soybean yield.

A fungicide seed treatment will be crucial. We have seen the benefits of planting soybeans earlier if the conditions are right. However, wet weather at emergence means that damping off diseases such as Pythium, Fusarium, Rhizoctonia and Phytopthora can be more prevalent and reduce plant populations. Make sure that you have chosen an appropriate variety with adequate resistance to these early diseases.

Are your phosphorus and potassium levels adequate? You may have already spread your potash this fall if you originally intended to plant corn. If not, you really should take a soil test to see how much you need to add. In a corn-soy rotation, we usually rely on soybeans to be able to scavenge leftover nutrients from the previous corn crop. Make sure there are no deficiencies!

Growers have not had to deal with soybean cyst nematode (SCN) as a pest in New York. However, last year I took a soil sample from five fields and two came back positive, (Monroe and Wayne Counties), but at very low levels. Crop rotations help keep SCN numbers reduced. Two years of soybeans would provide an opportunity for SCN populations to increase.

How was your weed control last year? Did you have any escapes of lambsquarters, ragweed or even resistant tall waterhemp? All of those weed seeds will be waiting there and would have probably been controlled with your corn herbicide program. Make sure you have a pre-emergence residual herbicide program in place and be prepared to come back with an effective post program if necessary. Just a reminder, if you used Prefix, Warrant Ultra, Reflex or Flexstar on your soybeans last year, you can't use them again this year. The maximum use rate for these products may be applied in ALTERNATE years for our region.

Soil borne diseases like white mold, brown stem rot and sudden death syndrome can cause significant yield reductions even in corn-soybean rotations. Make sure you have adequate resistances/tolerances in your seed variety. Lowering your planting population, widening rows and utilizing foliar fungicides when needed can help reduce white mold infection.

Mike Staton, from Michigan State, has a more detailed article on changes to make to your weed and disease programs to maximize yields in a soybean following soybean rotation. https://www.canr.msu.edu/news/recommendations for planting soybeans after soybeans. You might remember Mike as he was one of our guest speakers at Soybean Congress last year.



Fusarium wilt in soybean.

Photo: M. Stanyard / CCE NWNY Team

Heifer Immaturity Keeps Her from Being All She Could Be

by Margaret Quaassdorff

How do we know when it's time to first breed our heifers? The answer should be "when they reach a maturity (phenotypic characteristics) that allows for full expression of milk production during subsequent lactations", but that is not always the case on dairies. Many heifers are bred due to subjectivity about size, or when they reach a designated age regardless of size, or when they are crowded out of a growing pen into a breeding pen. According to a talk given by Gavin Staley (Diamond V) during the 2020 Dairy Calf and Heifer Association Conference, breeding immature heifers has a profound negative impact on the future productivity of the entire herd.

Why does heifer maturity matter? A 2005 article from the Van Amburgh lab, stated that a body weight of ~1,210 lbs was the optimum post-calving weight (without calf and afterbirth) to maximize first lactation milk yield (Meyer et al., 2005). The recommended optimum age at first calving (AFC) of the heifers studied was about 22 months to reduce the cost of feeding them for a longer period of time before they began to make money. Importantly, the paper also states that "the biologically and economically ideal body weight and age at calving is expected to differ with differing body weights at maturity"...meaning the size of your mature cows matter when it comes to age at first breeding (AGEFB) and calving in your herd, and might not be the same size as what is best for your neighbor's herd.

Are you reaching heifer maturity goals in your herd? It's time for some critical evaluation of your replacement heifers, and whether or not your management practices are increasing profitable heifer performance. Remember, we can't manage what we don't measure. Staley evaluated DairyComp305 records for "average annual milk" and "week 10 milk production" from 149 herds representing 401,000 first lactation cows. He found that an increase of 1lb of milk at 10 weeks of lactation in 1st lactation animals translated to an additional pound of milk for every cow, each day as these animals continued into later lactations (graph not shown).

In a single herd observation, Staley calculates that at an Average Daily Gain (ADG) of ~2lbs per day, breeding heifers can grow about 60lbs per month. For this herd, he suggest it could result in 2-3lbs more milk/cow/day for every month increase of AFC. In addition, heifer conception rate is around 55% for the first breeding, with the majority of remaining heifers having additional months to mature while becoming pregnant during the 2nd and 3rd

attempts. This is significant because it means that most of these 1st lactation animals (bred to calve in at 23 months in this herd) will underperform relative to their cohorts. Staley's graph (Figure 1) showed that 2nd lactation production curves display a similar pattern of production and age at calving. Though they are not the same animals, he suggests that most animals that calved in at 34 months for their 2nd lactation would have calved in at 23 months the year before, and are locked into lower production. With a large percent of herds being comprised of 1st and 2nd lactation animals, immaturity of these animals at first breeding could have a substantially negative impact on overall herd production, making it so that these herds never reach their full genetic potential. Just for fun... at what age were your highest producing cows calved in?

If an animal does not reach 85% of her mature body weight (MBW) before calving, she will try to reach it after, and at the expense of milk production due to energy partitioning to growth. In his presentation, Staley said that growing during lactation is costly because ADG is reduced to 0.3-0.4 lb/day, and for every 1lb of growth, it costs about 7lbs of milk. With this logic, it could take 1 month to grow 60lbs in the heifer phase, or 6.5+ months during lactation to gain the same amount. In addition, it is important to recognize seasonal fluctuation in ADG, and to manage accordingly. On many farms, there can be large swings of calf and heifer ADG ranging from 1.6lb/day vs 2.0lb/day depending on season; winter vs warm weather. If we do not take measures to mitigate this during the calf phase, there could be a 3 month extension of AGEFB to reach the same maturity level and weight.

Calving immature heifers has not been successful due to the industry moving towards calving heifers earlier

(Continued on page 14)



Heifers in pasture. Photo: M. Quaassdorff / CCE NWNY Team

Heifer Immaturity Keeps Her from Being All She Could Be

(Continued from page 13)

Graph 4. Milk production of Lactation 1 and 2, by age at calving

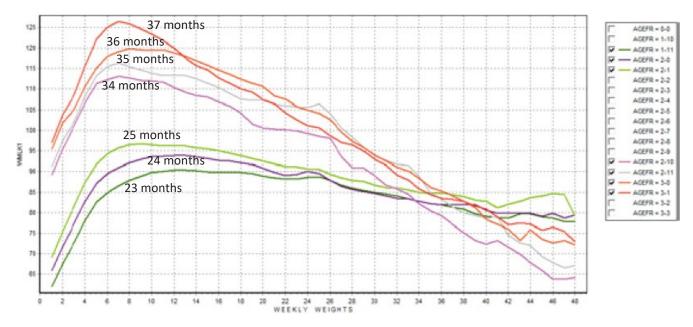


Figure 1. Graph by Gavin Staley presented in the 2020 DCHA Conference proceedings. The graph shows lactation curves by age at calving from cows in their 1st and 2nd lactations, and the pattern that younger animals make less milk in first and most likely subsequent lactations.

without changing management strategies to attain heifer maturity earlier. Immaturity affects the entire productive life of the animal, even beyond 1st lactation. Based on the observations from Staley, 1st lactation animals do not catch up, cannot be reset, and will not reach their full genetic production potential with compensatory growth.

How do we improve this immaturity issue? Determine ADG to achieve maturity by a targeted AGEFB, and implement the management practices needed to get there. Make sure to take a look at your range of AGEFB, not just the average, so you can see outlier on either end. In these times where strategically reducing inventory can be profitable, look for animals past your herd's ideal AGEFB. Choose to cull as unnecessary time to AFC will increase the cost to raise these particular heifers. If you find out that your AGEFB is too far out to be economically sustainable as far as feeding costs and housing space allow, then adjust to increase ADG (to increase both frame and weight) at a younger age. More inputs during the calf stage may pay off in the long run.

In order to determine the weight and age that a heifer needs to achieve to be 55% of Mature Body Weight for first breeding:

- 1. Determine your herd's mature body weight (MBW).
 - Weigh a sample of your 3rd and 4th lactation cows between 80-120 DIM
- Calculate the % of MBW of close up (>260 Days Carrying Calf) heifers, or fresh 1st lactation animals (<7 Days in Milk)
 - Weigh them during one of these time points. Closeups should be ~95% of MBW & fresh heifers should be ~85% of MBW
- 3. Determine the difference between desired and actual weights.
 - This is the body weight that must be made up by increase ADG as calves and young heifers, or by a delay of age at first breeding

To maximize your return on investment of different heifer program inputs, make sure you are keeping accurate growth (intakes of milk and starter; weight at birth, weaning, and breeding pen entrance) and health (vaccination and treatment) records. Tailor your starter grain nutrient content to your milk feeding regimen, and consider asking your nutritionist to formulate a postweaning diet accordingly. A well-grown, healthy heifer leads to a profitable successful milking cow.





2007 MACK GRANITE CU713; Mack 335 HP; Allison Auto. Trans; Double Frame; 21° Alum. Box; 18K F/A; 46K Relas: On Carnelback Susp.; Steerable. Lift Aude; 8,995. Hours; 174,712. Miles; 54, w4156. Baz auto. 먎



2005 PETERBILT 378; 475 HP CAT C15; Jake Brake; 10-Spd. Manual; 200° WB; 12,000# FrA; 46,000# Locking Rears on Chalmers Susp.; Polisted Alum, Wheels; Dual Exhaust & Air Clearers; 738,651 Miles; Six. #5821 - \$40,000



2006 MACK GU813, Allson Auto, Trans; Double Frame Tri-Avie Dump Wydking-Chies Tub Style Box wyBeit Unloader; 20K FA; 46K FA; Jap, Air Rude Suss.; 20K Non-Severabe Lift Avie, Will Separate Body from Classis. 21 Fo' Ol Frame Behind The Cab, 20G*C-1 Muffler Takes Up 12* O'l These Measurements; 151,516 Miss. 58. #6174-3.554 9010 s, \$1, #6174 - \$54,900





2006 KENWORTH T800; Plated Winch Truck w/Braden 30-Ton Winch; 550 HP CAT C15; 18-Spd. Manual; 16K F/A; 46K Full Locking Rears; 284* Wilß; 18°6* Deck, Air Ride Susp., Flip Over Shift Wheel; Will Separate Deck 4 Winch from Crassis; 21° Farne; 206* CT; 9.30 Ratio; 295,224 Miles; Stk. #6148 - \$45,000 CASE.



2004 PETERBILT 320; CAT 330 HP; Allison Auto., Retuse Truck w/1 80° WB; 18K F/A, 44K Rears; Can Separate Compactor from Chassis; 17 Frame Behind Cob.; 148° CT; 14,873 Engine Hours; 69,512 Miles; Sk. #6209 - \$37,900



2004 INTERNATIONAL 5600; 385 HP Currnins ISM; 8LL Trans; Double Frame Dump Truck w/18K F/A; 52K Full Locking Rears; Hendrickson Susp.; 184* WB; Cran Separate Body from Chassis; 14*2* Frame Behind Cab; 121* CT; 117,870 Miles; 5k. #6225 - \$32,900



(UTY, 2) 2004 KEHWORTH TROO; 380 HP CAT C12 Couble Frame; Alec AC18-708 Grane; (5) Outriggers; Chal , Etc. Chassis; 25' Frame 8ethnd Cab; 232' CT; 8,995 Hours; 133,450 MMe 10,482 Hours Six, #6227 - Price With Grane: \$62,900 + SEG 0H0 UH 2003 w,430 HP CAT CT2; 68K GW//; Same Crane Specs - \$57,900



KOMATSU,

PETE.

WE BUY MACK

CAT. and <mark>2003 KENWORTH T800</mark>; 475 HP CAT C15 GNZTurbo; BLL Manual Trans.; Clean Daybab w/12,800# Front XXIe; 46K Rears On KW 8-Bag Air Ride; 4.11 Ratio; 86" WB; Wetline; 447,898 Miles; lk. #5925 - **\$49,900**



2010 PETERBILT 365, 350 HP Cummins ISM Engine; Allison Auto; Long, Double Frame Cab & Chassis w/300" WB; 227" CT; 31' Frame Behind Cab; 18,000# FA; 60,000# R/A On Hendrickson Susp.; 87,267 Miles; Stk. #5907 - \$59,900



1999 MACK RD688S DUMP TRUCK; 400 HP Mack E7; Engine Brake; 8LL Trans; Rubber Block Susp.; Tri-Ade; 19°Seel Body; 20,000# F/R; 46,000# R/R; 22.5 Tires; 248° WB; Space Wheels; EXPORT PRICED!!!; 777,148 Miles; Sk: #5902 - \$19,500



2005 PETERBILT 357; 370 HP Cummins ISM; 8LL Trans. Quad Axle Cab & Chassis w/Double Frame; 18K F/A 44K Full Locking Rears; (2) 11K Steerable Lift Axles Ari Trac Susp; 22° Frame Behind Cab; 212° CT 302,500 Miles; Stk. #5831 -\$41,500 KOMA



2002 KENWORTH T800; 475 HP CAT C15 602; 10-Spd. Manual; Double Frame; Baycab w/20,000# F/8; 46,000# Loking Bears; (BWMY Air Rice Susp.; 529 826, 204" WB; 16' Of Frame; 186,151 Miles; Stk. #6097 - \$39,500



2007 MACK CT713,Mack 370 HP; 91L Trans.; Double Frame Plow(Sander 11*One Way Plow & Wing; Lansu Sander CTR Drop Spirmer; 20KF, 48K full Locking Rears; Hurmaox Susp.; 4.30 Rato; 258*WB; 260,163 Miles; Sk. #6173 - \$31,000



2007 MACK CT713; Mack 427 HP; Allison Auto.; Double Farne Flow/Sander Truck w/Stratos B70-42 Spread w/Cherrical Sprayer; 20 K FA; 20 K LH; 46K full Locking Pears On Haulmass Susp.; Schrindt Controls; 240° MB; 19° Seel Box w/Targ; 335,602 Miles; Sk. #6172 - \$43,900



2007 KENTVORTH T800; CAT 380 HP; 13-Spd.; Vacuum Tru w/Almac Machine Works 3,440 Gal. Fark w/Dump & Pear Hatol 270* WB; Ali Ride Susp.; 16K FA); 46K full Locking Rear 4,10 Rato; 80,985 Miles; Stk. #6144 - \$69,900



IGHTLINER. 002 MACK CL713; 460 HP Mack E7; 18-Spd.; Double Frame ab & Chassis; 20k Frd, 46K Rears; 292" WB; 24°6" Frame ehrind Cab; 20°6" CT; PTO; Good Rubber; Mack Ari Ride usp.; 309; 234 Miles; 17,680 Hours; Stk. #5909 - \$32,500 FREI



2006 WESTERN STAR 4900SA; Double Framed Crare Truck; CAT 410 HP, Allison Jun. Trans, 2016 Fig. 46K full Locking Rears; 16K few Mourted LH Ade; 247 Seel Deck, Chairmers Susp., 72* Spread; MT16000 Dywal/Block Cane; Can Separate Cane & Deck From Chassis; 30ff Frame Belrind Cab; 202° CT; 264* WB; 274,074 Miles; Skr. #5948 - \$28,900



2005 MACK CX612;350 HP Mack AC330; 10-Spd.; Ruming Single Ade Tractor w/12K F/A; 20K Rear; Air 149" WB; 764,211 Miles; Stk. #5885 - \$11,500 MANY OTHERS AVAILABLE



2005 PETERBILT 357; CAT 305 HP; Allison Auto; Clean Cab & Chassis; 20K F/A; 46K Rears on Haulmaax Susp, 17" Frame Behind Cab; 140" CT; 216" WB; New Drivs Tires; 129,217 Miles; Stk. #4894 \$59,000





2005 FREIGHTLINER FLD; Detroit 12.71. 455 HP; Allison Auo; Clean Low Mile Cab & Chassis w/2,000e From Ade; Auto; Clean Cab & Chassis w/18 K R4-GK Full Lodering Rears; [2] 11,000e Steerable Ut Aces; 44,000e Full Lodering Rears; [2] 11,000e Full Lodering Rears; [2]



 2010 INTERNATIONAL 5600; 425 HP Currnins ISM, Allison
 2004 WESTERN STAR 4900S 430 HP CAT C12

 Automate Trans, 172 WB, Wellins, 200 K rout Jake, 50K Rears
 13-5gs, Manuar, Clean, Low Mile Tank Truck w/d, 360 G8

 On Herbirdsson, Susp.; 12624 S Rubber, 225, 175 Wiles, We
 18-5m Air Suspension, Low Mile Tank Truck w/d, 360 G8

 Can Siretch This Tractor To Arry Length For HD Cab & Chassis
 252° WB, Chairners
 Suspension; 133,613 Wiles

 Six, #3943 - 347,000
 38-79,000
 38-79,000
 38-79,000



\$\$\$\$\$ WE BUY MACK, FREIGHTLINER, PETE, KENWORTH, Etc. TRUCKS and CAT, KOMATSU, CASE, HYUNDAI, IR, Etc. CONSTRUCTION EQUIPMENT for \$\$\$\$\$

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An Important Note from our Team

Cornell Cooperative Extension's Northwest New York Dairy, Livestock, and Field Crops Program prioritizes the health, safety, and well-being of our staff, constituents, and community members. Given the uncertainty surrounding the rapidly-changing COVID-19 situation, many of our <u>upcoming events</u> have been cancelled or postponed. This includes on-site farm visits and consultations. Our <u>specialists</u> are still available to help you via phone, text, video-conferencing, email and hard-copy mail as needed. We will resume our regular programming as soon as we can. Stay up to date on all of our program offerings by visiting our <u>website</u> or contacting any of our team's specialists. Our direct phone and email contact information is listed on page 2. We look forward to helping you manage your farm business during this time and hope that you and your family stay safe and healthy!

<u>Free Equine Pasture Management Webinar</u> - The horse farm manager who understands plant, soil and animal ecology is prepared to be an excellent pasture manager, to understand how to adapt to changes in weather and interpret how research and farmer experience from other areas apply to their farm. <u>Click Here</u> to access the webinar recording or visit: https://youtu.be/y4mh9wh50Ks

COVID-19 Information Websites:

Need information? View the following Cornell CALS and CCE Resource Pages that are updated regularly.

General Questions & Links:

https://eden.cce.cornell.edu/

Food Production, Processing & Safety Questions:

https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/

Employment & Agricultural Workforce Questions:

http://agworkforce.cals.cornell.edu/

Cornell Small Farms Resiliency Resources:

https://smallfarms.cornell.edu/resources/farm-resilience/

Financial & Mental Health Resources for Farmers:

https://www.nyfarmnet.org/

Cornell Farmworker Program

www.farmworkers.cornell.edu

www.trabajadores.cornell.edu (en espanol)