

Better Naturally!

Notes & Quotes

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Our Mission
Your trusted partner; creating superior products for healthier soil, plants and animals. Healing the earth and feeding the world
- Better Naturally!



News From The Front:

Upcoming Events

To protect the health of our staff members. We are still limiting our participation at in-person events. Check out our social media for updates. Or you may call our office at 717-367-1566 or 800-347-1566.

Mid-Atlantic Fruit and Vegetable Convention February 1st -3rd 2022, Hershey Lodge Hershey

February 1st -3rd 2022, Hershey Lodge Hershey PA Info: 717-694-3596 or PVGA@pvga.org

Marketplace

Certified Organic Cows & Springing Heifers for sale. 29 cows and 10 bred heifers. Timothy & Joan Hoover, 24 Boardman Rd., Rome, Pa 18837 Phone – 570-247-2751

New Dealers:

Fieldstone Farm and Orchard - 6901 E 149th Street, Overbrook, KS 66524; Contact Uriah - 785-665-7643, Email - uriah@twelvetribes.org www.fieldstoneorchard.com

Shady Grove Bio Ag - David Lynn Eshbach 17703 County Road 4057, Kemp, TX 75143 972-576-6365; Email - sgf2001@privategarden. org

Thank you!

We want to thank you for your business and the loyalty throughout this past year. You have experienced extremely long lead times, like never before due to staff shortages. We appreciate your patience throughout this trying time. We are looking forward to working with you again in 2022.

To our dealer network—if any of your information on our website changes, please use the form on the outlet page and request the change online. This is the quickest way to get this accomplished. For those without access, please call the office (800) 347-1566 to make the change. — Thank you!

Holiday Hours

The Fertrell plant, office and shipping department will be closed on the following days for the holidays:

Thanksgiving

November 25th - 28th, reopening on November 29th

Employee Christmas Appriciation Party
December 15th at noon.

Christmas

December 23rd at noon - December 26th reopening on December 27th.

New Years

December 30th - January 2nd, reopening on January 3rd

Numbers 6:24-26 "The Lord bless you and keep you; The Lord make His face shine upon you, and be gracious to you; The Lord lift up His countenance upon you, and give you peace."

Winter Shipping Strategy

Plan ahead... we do not have any control over the weather patterns that may delay our incoming commodities and the outgoing shipping of your Fertrell products. Both of which can cause delivery delays, and you to be out of products. So, **please** place your orders a little **sooner** than usual, and maybe bring in a few extra bags to hold you over.

Remember to keep the way clear into where your products will be delivered. Delivery drivers, not Fertrell, will determine if your products can be delivered safely in and out of your facility, and if not, there will be redelivery charges incurred (they are very costly, and not negotiable for reduction with the freight companies). Also, a possibility on your end, is to make arrangements to have your orders dropped at a local business to avoid delivery issues this time of year.

Thanks so much! Have a wonderfully Blessed Holiday Season!



Organic & Conventional Brown Pullets for sale.

Hyline brown, Novogen brown, Bovan brown & Easter Eggers.

- Also GMO Free pullets available.
 - Delivery of pullets available.

Call New Generation Poultry Service Inc. newgenpoultry@gmail.com
(717) 587-9113



Creating Forage Inventory By Jeff Mattocks

As fall ends and winter begins, many farmers turn their attention to the stored forages they've made for their herd. The last hard field work will soon be over giving way to holidays, weddings, and other celebrations. This is also the best time to inventory your stored forages, including hay, corn silage, haylage, and grain. It will allow you to accurately estimate how much additional feed you will need to buy or how much extra feed you will have to sell till the next harvest season.

You can make your calculations from either direction, meaning you can determine how much feed you will need to feed the number of animals you have. Or you can determine how many animals to feed based on the total amount of feed ingredients you have.

I use the following figures: A 1400 lb. average Holstein cow producing 65 lbs. of milk will require 48 lbs. of dry matter per day. The typical ration looks like the table below.

You can make your calculations based on figures similar to these, adjusting for your personal preference. Based on these numbers, a 40-cow herd of cows will require:

<u>Corn Silage</u> - 290 tons or 584,000 lbs. for 365 days or year-round.

<u>Balage/Haylage</u> - 96 tons or 192,000 lbs. for 240 days while not on pasture; add 1/3 more for year-round feeding.

<u>Dry hay</u> - 87 tons or 175,000 lbs. for year-round feeding – Cows need hay while grazing as much as they do in the winter.

<u>Grain Mix</u> - 116.5 tons or 233,600 lb. per year for year-round feeding.

Now you have calculated the milking group feed requirements, what about dry cows and young animals? You can do the calculations for them the same way, or I have found that by adding 1/3 more to the milk cow group totals, it will be very close to accurate depending on how many heifers you keep.

Why should you bother to calculate all of this? Well, hay, grain, and forage prices are usually less expensive when bought directly from the fields or in season than in mid-winter or early spring. So, knowing what your inventories are and what you need to make it through will allow you to buy sooner and smarter.

Most years, hay can be bought out of the field for 25%-30% less than hay bought in December or January. Summer or in-season hay is 35%-40% less expensive than hay bought in February and March. For sure, Corn silage can be purchased for less at harvest and will be a safer feed to feed if bought then vs. buying in during the summer, causing a re-heat and lessened digestibility.

The other management tool that is very effective is sweeping the herd or strong culling. Knowing your feed inventory would be the best time to make herd number adjustments at this time of year. If you buy more than 20% of your total feeds required to feed your animals, you should consider

reducing the herd size to the farm feed-making capacity. Many wise old farmers would regularly cull 10%-20% of the herd to make room for new animals, remove problem makers and reduce health problems like SCC, poor breeders, and hoof-related problems. They found that this herd reduction *did not* significantly impact the herd's *profitability*. The healthy, productive animal's performance improved, making up for the reduced animal numbers. Remember to measure the profitability, not just the cash flow. And that a dollar made and a dollar spent doesn't change what is in your pocket!

Fertrell® SINCE 1946
Better Naturally!
ARE YOU READY FOR THE PLANTHING SEASON?
Let us help you determine a plan for planting season with free soil recommendations
at no cost to you.

Give a copy of your soil tests
and field histories to your
local representative, or mail
them to us.

PO Box 265,
Bainbridge, PA 17502

Feed	Lbs. as fed	Moisture	Dry Matter	Lbs. dry matter
Corn Silage	40	65%	35%	14
Balage or Haylage	20	50%	50%	10
Dry Hay	12	15%	85%	10
Grain Mix	16	12%	88%	14
Total	88 lbs.			48 lbs.



Enhance Your Manure By Seth Epler

Manure is definitely one of the best tools we have to feed our soils. However, it does have its challenges. Cleaning out box stalls alone can be back breaking labor. Neighbors will sometimes have a gripe about the strong odor of freshly spread manure. This is where Fertrell's Pit N' Pen comes in to play.

Basically, using Pit N' Pen will help break down the manure to a more soil friendly component. It helps by dissolving the solids and digesting the fibers within the manure. It also reduces the strong smells and nitrogen loss. Pit N' Pen helps neutralize acids in the manure making it more compatible with different soils. It can also help break down all of the sludge at the bottom. of pits and stalls.

Therefore, it will pay to enhance your manure. Pit N' Pen is available in a 25 lb box. That amount can treat up to 500,000 gallons of liquid manure, and up to 35,000 cubic feet of dry pen pack bedding manure.

For dry manure packs the application rate is a ½ pound per 100 square feet. If it is non fibrous, as in not loaded with straw and bedding, apply every three inches of depth. If it is fibrous, or full of straw and bedding, apply at every 6-8 inches of depth.

For liquid manure, there is an initial treatment of 2 pounds per 10,000 gallons. And after that, it is recommended there are subsequent treatments of ½ pound per 10,000 gallons.

Manure is such a great asset in enhancing our soils providing a great source of nutrients. And Pit N' Pen is a low cost and simple way to further that enhancement in bettering our manure. When we take manure enhancement and continue focusing on fertility through Fertrell fertilizers, cover cropping, and sound crop rotations, we get a very strong and well-rounded program to continue to work with our land *Better Naturally!*





Fermenting Food and Drinks By Don Brubaker

My love for it, I guess, started when I was born. My mother, along with many of you, gardened to put food on the table. She would can and freeze throughout the summer and into the fall. I don't remember ever going hungry. The basement always had plenty of jars filled with fruits and vegetables, not to mention a freezer or two that were full come fall. Life on the farm was good.

As I grew into adulthood and got married, my interest in gardening and food preservation continued to grow. By then, the term homesteader became popular, and I always dreamed of taking it to the next level. The years passed, and in the fall of 2010, my wife of 20 years passed away. I can still remember hospice telling me to recreate myself, and I can remember telling myself that I'm pretty happy with who I was. Well, let's fast forward; I have changed, my love for food has grown. Not only do I still enjoy preserving food, but now I can do it with my new wife, Ann.

Together, we can freeze our garden bounty. We have also added drying food with a food dehydrator. Every day I eat a blend of fruits, including apples, pears, peaches, and strawberries, raisins (which we harvest and dry), adding nuts and seeds that I very much enjoy. In the spring of 2020, we purchased a freezer. That enabled us to step up our game in preserving food. With a freeze dryer, you no longer need to can or freeze. If stored correctly in mylar bags, your food can last up to 25 years, they claim. I guess we'll have to wait and see.

Thanksgiving weekend of 2020, we had decided to try our hand at salt curing some pork. I ordered half of a pig to try it out. We salt-cured a ham (prosciutto), for the fun of it, it's still hanging in our kitchen, almost two years later. Salami is still hanging on the back porch. Capicola is made from the muscles of the pork shoulder. Pancetta is made using pork belly. Not much, if anything, goes to waste from a pig. Even the fat can be

made into lard. Sliced thin, it will go great with your favorite cracker. One of the most interesting experiences was taking the neck bones with all the meat and salt curing them. After many days in the salt, depending on the weight, we were instructed to remove from the salt by washing it off with cold water and drying it. Then we were to put on a dish towel and keep it in a cool place. I didn't rotate the cut of meat, so after a while, mold started to form. My son, experienced in salt curing, saved the day by telling me to wash and scrape the mold off and pour wine all over the cut of meat. We enjoyed that cut of meat for some time. Another great salt-cured meat that we have tried is duck breast prosciutto. Tastes great, sliced thin with your favorite cheese and cracker with a glass of wine.

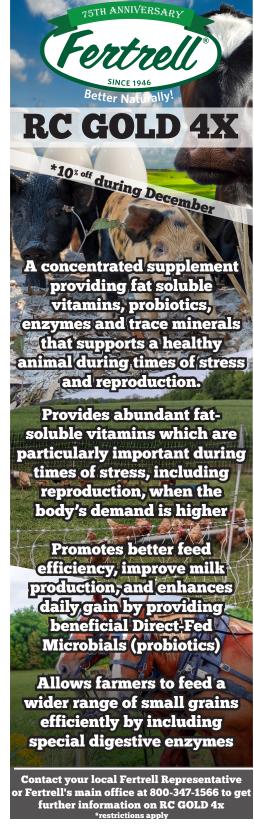
I almost forgot about beverages. For years we have been making kombucha, and most recently, we have tried our hand at milk and water kefir. Kombucha remains our favorite beverage.

I will share the recipe if you would like to give it a try.

- 1 gal of un-chlorinated water
- 4 or 5 green or black tea bags
- 1 cup of raw sugar
- 1 scoby
- 8 ozs. Of a previous batch

Bring the water to a light boil, add the sugar and tea bags, stir, and sit for 15 minutes. Remove tea bags and let cool to room temperature. Add the scoby, cover the top with dishcloth or coffee filter, and rubber band. Let sit for four to 5 days, remove the scoby and enjoy. You can also do a second ferment by adding fruit, herbs, flowers, and ginger to taste and in different combinations. My favorite is black raspberry ginger. Enjoy









Milk Fever Complex by Doc Tom Roskos

Cows at freshening time are faced with many challenges, among them being electrolyte imbalances.

Demands for calcium in the body greatly increase at the time of calving. Calcium is required for proper muscle contractions. The birthing process requires strong contractions of smooth muscles in the uterus as well as the other muscles of the abdomen. Cows that are low in calcium will have a difficult time dilating the cervix and quickly

delivering the calf. Additionally, inability of good muscle function can present as "milk fever" where a cow is unable to stand. Prevention of this during the dry period is accomplished by feeding 2. a high quality dry-cow mineral and adequate levels of Vitamin D. A dry cow mineral usually contains 1:1 ration of Calcium to Phosphorus. Excess Calcium levels can be detrimental.

It is common to see some degree of a milk fever complex at the time of calving. This involves the interplay of 4 primary elements: Calcium (Ca), Phosphorus (P), Magnesium (Mg), and Potassium (K). Of these, calcium is the most important. Range of symptoms of a calcium shortage are dependent upon how low the blood calcium levels are. Clinically progression of symptoms would go as follows:

- Off feed or decreased appetite with a low or normal temperature (101.5 or less)
- Ear flicking / tail swishing when working with cow
- Slow progression with calving / poor cervix dilation
- Difficulty in passing manure / hard manure
- Weakness or instability when standing
- Unable to get up
- Lying flat on side / rumen bloated up
- Comatose "deep sleep"
- Death

Treatment options are base on severity. Cows that are able to stand can respond adequately to oral products, such as liquids, gels/ pastes, or boluses. They certainly also can be treated with IV products or by sub-q 23% calcium. Once they are unable to get up, treatment is best given IV or sub-q 23% calcium. If they advanced to the stage of being flat out or comatose, the only option is IV.

These are some important considerations with calcium administration:

 The only calcium that should be given sub-q is 23% Calcium (also called 23%)

- calcium borogluconate). All others may cause abscesses and cellulitis.
- 2. All oral calciums are caustic. Make sure heads are well retrained and administer gently. Irritation or tearing of back of throat (Pharynx) can result in cellulitis which is painful and fatal. Lubricate large boluses with vegetable oil before administering. Never give oral calcium to a downer that cannot swallow.
- 3. Always warm up the IV calcium to body temperature before administering. Administer slowly while keeping a hand on the jugular vein or over the heart to monitor the pulse. It is normal for pulse to quicken but abnormal beats or rhythm would be reason to stop the IV.
- 4. IV calcium causes a spike in blood calcium level over normal. Do not repeat IV calcium for at least 6 hours after first treatment unless a very large cow or old Jersey and no significant improvement.
- Milk fever will be most common in cows third lactation or older (second lactation or older in Jersey and Jersey cross). Nearly all fresh animals will have some drop in blood calcium levels at calving. Not all will require treatment.

Other blood electrolytes play a role in the fresh cow "milk fever complex:"

1. Phosphorus – a deficiency of this can contribute to cows being unable to stand. Often will see this demonstrated as a bright downer. The cow will be alert and difficult to halter and may move around a lot when trying to start in IV. Upon completion of treatment, they try to get up but just can't quite do it. They may eat and pass manure but often need some time to rise.

Clinically, these cows are usually treated with calcium initially. Calcium products

such as DMPK and Amcalcilyte also contain phosphorus. The preferred method to provide additional phosphorus is orally. The phosphorus in mineral form is not quickly absorbed and not suited for treatment purposes. A product containing mono or disodium phosphate provides quick absorption. An excellent product is Phos-Drench from Dr. Paul's Lab.

2. Magnesium – a deficiency of this is sometimes referred to as "grass tetany", although that term refers to the condition in cattle grazing lush pasture during cool wet springs. In fresh cows, it exhibits as an aggressive downer. They will lunge when trying to be haltered or will charge if they are still up.

Calcium is indicated as a treatment as 50% of the cases will respond to just calcium treatments. Again, CMPK and Amcalcilyte contain magnesium and help to improve the cows.

I have certain products that I like to give cows during this time. Work with your veterinarian to develop protocols that work on your operation.

Downer Boluses – I give these as source of the 4 major electrolytes involved in the Milk Fever Complex. Because they are boluses, I only give to animals that are able to swallow and are sternal or standing. I give 2 boluses twice per day, starting before freshening if needed.

Phos-Drench – I see more cows that have some degree of phosphorus deficiency as well as calcium deficiency. My standard protocol is to give calcium initially. I like IV or sub-q 23% calcium borogluconate as an initial treatment. If response is not satisfactory, I will repeat calcium treatment in 8-12 hours and give 1 bottle of Phos-Drench orally. For large cows, old cows, or overly conditioned cows, I will repeat once in 18-24 hours. Make sure to shake the Phos-Drench well before giving and add some water to rinse out remnants off the bottle.







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