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SINCE 1946

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Notes & Quotes

INSIDE THIS ISSUE

David Mattocks

On Wednesday December 2nd, 2020 left this world spiritually at around 5:15 p.m. He gently faded while sleeping. He went quietly and quickly without significant pain and suffering. Dad was born February 25th, 1936 in a small town of Guys Mills, PA in northwestern Pennsylvania, where he grew up on a small family farm along with 4 brothers and a sister. Our father had 84 wonderful years on this earth showing compassion for thousands of folks and sharing his wisdoms for both God and agriculture.

Dad was always on a mission. At an early age of 12 he knew he wanted to be a spiritual leader, a preacher in the church. He never lost that vision over the years. It wasn't until later in life that he studied diligently and passed his pastoral ordination course. This was not his only mission in life. As far back I remember, his second mission was agriculture. He always had a soft spot for small family farmers. Many of you came to know our father while working at Fertrell supporting and promoting sustainable farming ideals. In 1966, he purchased O.S. Brock distributing, when he started selling Fertrell organic fertilizers and soil amendments. Dad joined Fertrell as an employee in 1980 selling to local farmers in the Lancaster County area.

His passion for supporting family farms was contagious and spread well beyond Lancaster county Pennsylvania. Dad soon was traveling to many states to spread his farming wisdom with hundreds of farmers. We cannot fathom how many people

our father has impacted and influenced across the country. This passion was often referred to as a "Labor of Love" because he loved what he was doing. Making a difference in peoples' lives whether it was farming or spiritually. Helping people in any way possible was really his passion. This passion was felt by family, friends, employees, customers of Fertrell, and anyone who took a few minutes to talk with him. He genuinely took an interest in the lives of everyone he met.

While we regret losing him in our lives, we take comfort knowing that he is in a better place for his eternal life to be spent with his Lord and Savior in Heaven. We try not to be saddened by our loss but focus on the positives that remain.

We appreciate all who have reached out to us while he was under home hospice. And to those who called and talked to him in the final days. The outpouring of love was wonderful for dad and the family.

We realize that many of folks would like to call, write or send a card. Calls are difficult, so I would not recommend calling. If you would like to send a note or card please send those to the Fertrell address. We will gather them and take them to the family for reading. We really appreciate all of you as our father did!

My Father's parting comment to many can be found in many places including the back side of his business card "If we meet and you forget me, you've lost nothing. But, if you meet Jesus Christ and forget him, you have lost everything."

Sincerely, the family of David Mattocks

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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!

Egg Yolk Color

By Jeff Mattocks

Egg yolk color has become a hot topic of discussion among egg producers. The conversations are intensifying over the past year and half. There has been increased pressure from the consumers that is trickling back down to the egg producers. The consumers have been convinced by someone that the more yellow or orange an egg yolk is the more nutritious. Well, that is true to a certain extent. When egg yolk color comes from natural sources like green grass and alfalfa meal it does enhance the egg to have higher vitamin and mineral levels. This is true! Not so long ago, Mother Earth News gathered eggs from different farms around the country raising laying hens on similar pastured poultry systems but with slightly different management styles. This is what they found:

From Mother Earth New Egg study October 2007

Most of the eggs currently sold in supermarkets are nutritionally inferior to eggs produced by hens raised on pasture. That's the conclusion we have reached following completion of the 2007 Mother Earth News egg testing project. Our testing has found that, compared to official U.S. Department of Agriculture (USDA) nutrient data for commercial eggs, eggs from hens raised on pasture may contain:

- 1/3 less cholesterol
- 1/4 less saturated fat
- 2/3 more vitamin A
- 2 times more omega-3 fatty acids
- 3 times more vitamin E
- 7 times more beta carotene

So, what makes the difference? This argument will never have a resolution. Some believe it is the pasture or forages the hen eats, some think it is the breed, some think it in the feed and some think it is complete luck!

To some extent each of these ways of thinking is correct. Younger hens will have higher nutritional levels in their eggs than older hens.

Pasture and fresh forage contain vitamins A and E that will be passed into the egg. Some breeds of chickens will consume more green forages than other breeds. And as to the luck part, well, it really depends on how old the eggs were before they got tested. Vitamins have a shelf-life. In an egg, in my opinion, the vitamins are pretty stable for about a month. After that some vitamins will start to degrade.

Let move on to factors that can and will affect egg yolk color and quality. There are a few factors that could be contributing to the egg yolk color:

1. The breed and how much stored yellow they have in their bodies. Yep, that's right. The pullet will gather and store carotenoids or xanthophylls in her body for the egg laying season of her life. These deposits are in the legs, a donut shaped gland around the vent, around the eyes, and beak.
2. Older hens have less yellow (xanthophyll) reserves than younger layer or pullets. This can be seen in the legs. As they age and lay eggs their legs will gradually be less yellow.
3. Some are just better foragers and eat more grass.

Pullets should always have the darkest yolks. As they age the xanthophyll runs out of the body reserves – legs, deposit around the vent, beak and other parts of the body. So, the older the hen the less color she can add to the yolk. This is why supplementing the diet with xanthophyll or carotenoids is important to keeping the yolk color more orange than yellow.

Feed ingredients rich in xanthophylls help im-



prove yolk color. For example, alfalfa meal, fresh alfalfa, fresh pasture, corn, dried marigold flower

petals, and paprika powder are all great sources of xanthophylls. Depending the diet, including 100 lbs of alfalfa meal per ton of feed will help with yolk colors. When pasture is scarce in the winter, offering hens flakes of alfalfa hay can also help improve yolk color. The flakes of alfalfa will also give the hens something the scratch and peck at! Marigold and paprika are used at much lower levels. 1-2 lbs of marigold and 1-2 lbs of paprika per ton of feed will help improve yolk colors. 1lb of each per ton for younger birds, 2 lb of each per ton for mid-lay cycle and 3 lb of each per ton for late lay cycle hens. This will aid in keeping uniform yolk color in your laying flock.

Seed Soaking

by Brandon Williamson

A good strong start to your season can make all the difference.

It starts with the seed. It is one of the most impactful decisions you will make for your operation for this coming year. It's one that I'm sure you haven't taken lightly. You've decided what you need to grow, determined the right genetics, suited for your environment, that you give yourself the best chance to have a growing season full of healthy productive plants. You are all ready to go and eager to get them established. So, what's the next step you can take? Seed Soaking!

Whether you are starting seeds in a greenhouse



for transplanting, or are going to direct seed. Soaking your seeds in a seaweed extract solution, can help your plants start quickly. It will also make them stronger, grow a larger root mass and give them a much better chance to survive and thrive all season long. Seaweed is loaded

with natural growth hormones and contains many beneficial trace elements. In fact, seaweed contain almost every micronutrient plants need in a form that is available to them. One of the hormones found in seaweed extracts is called gibberellic acid. Gibberellic acid is the most potent germination promoter.

According to T.L. Senn, in his book Seaweed and Plant Growth. Lettuce seed will germinate in darkness if treated with gibberellic acid. In nature, gibberellic acid triggers the release of enzymes in the seeds that begin the germination process. Soaking seeds overnight in seaweed extracts may improve germination rates by up to 25%. Just make sure to soak them long enough for the seeds to swell but not so long that they might begin sour and rot. Many sources recommend 8-12 hours and no more than 24 hours. Soaking plant roots in the extract also reduces transplant shock and speeds root growth. We recommend soaking in a solution extract of Ascophyllum nodosum and water at a delusion rate of 3 oz to a gallon of water. Want more information on seed soaking? Send us an email at Agromony@fertrell.com

January Special 10% off Premium Potting Soil

Premium Potting Soil is blended in accordance with the national organics program using only the best ingredients. The potting soil has nutrients added to aid in quick uniform and vigorous germination of seeds.

Our potting soil has enough nutrients added to the blend to grow the plants to a transplantable size. The excellent water retention ability of our potting soil means less water is needed. This blend will support the plants immune system for a healthier transplant. Aragonite has been added to the mix to encourage better utilization of the nutrients in the blend. Aragonite is a coral and sea shell blend that is much more bio available than rock lime.

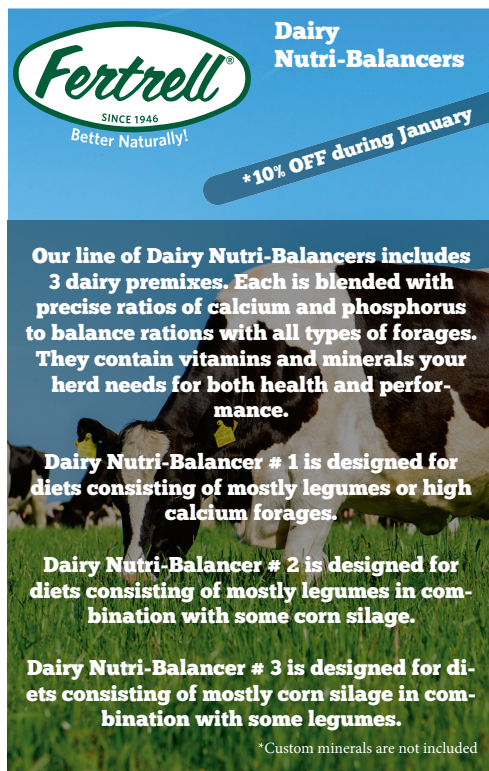
Whether you are growing plants from seed, plugs or you are raising perennials and shrubs you will not be disappointed in this potting soil. One 2.8 cu. ft. loose filled bag will fill 33 (50-cell) flats. This product is only seasonally available.



It's time to plan for the 2021 planting season!

Our Premium Potting Soil has enough nutrients added to the blend to grow the plants to a transplantable size. 3 cu. ft. loose filled bag will fill 33 (50-cell) flats

10% OFF during the month of January



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Dairy Nutri-Balancers

***10% OFF during January**

Our line of Dairy Nutri-Balancers includes 3 dairy premixes. Each is blended with precise ratios of calcium and phosphorus to balance rations with all types of forages. They contain vitamins and minerals your herd needs for both health and performance.

Dairy Nutri-Balancer # 1 is designed for diets consisting of mostly legumes or high calcium forages.

Dairy Nutri-Balancer # 2 is designed for diets consisting of mostly legumes in combination with some corn silage.

Dairy Nutri-Balancer # 3 is designed for diets consisting of mostly corn silage in combination with some legumes.

*Custom minerals are not included



Liquid Kelp Concentrate

10% off during February*

Many liquid fertilizers are fish-based, which is great for providing nutrients but also comes with a fishy odor which may not be desirable for some crops. Fertrell Liquid Kelp Concentrate does not contain any fish but does provide trace minerals and micronutrients along with auxins and cytokinins to help boost the natural immune system of your plants. Healthy plants are better able to cope with stressors like diseases, pests, heat, and drought. Kelp also contains iodine which is readily absorbed by plants and deters some pests. Concentrated liquid Kelp can be foliar, drench or drip applied at rates of .5-1 ounce per gallon of water or 2-3 pints per acre, every 7-10 days throughout the growing season.

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Liquid #3

2-3-1

10% off during February*



Use as a transplant solution or apply during stress periods of plant growth i.e. early growth, budding, pod formation, fruiting, prior to frost, and crops damaged by herbicides



Also use as a foliar spray or added to liquid fertigation systems. When foliar feeding, apply fine mist in early morning or late afternoon.

*Restrictions Apply

New dealers:

Roman C Schmucker - E 10608 Shortcut Road,
Cashton, WI 54619

Green Spring Ag - 5688 Old Forge Road, Rocky
Mount, VA 24151 (540) 420-1639

Nathan Gingrich - 2333 Perrytown Road,
Scottsville, KY 42164

What's your soil life doing? by Orin Moyer

It may be cold outside, and at this time of year, the soil temperatures are very frigid if you are a microbe or fungi—but that doesn't mean things aren't getting ready to happen. There are a multitude of factors that influence how active your soil life is over the winter season, and the most important one is cover crops. Cover crops help keep the soil protected from extreme temperatures by holding snow cover, providing insulation, and winter annuals will even continue to photosynthesize in cold temperatures. When this happens, the crops continue to put small amounts of sugars into the soil for biological food. Let's look forward to what will happen in just a few months when the soil world really gets going. You might think spring is busy for you, but microbes and fungi never sleep when soil temperatures start to warm up. These guys go 24 hours a day, and they don't even take off for holidays, which kind of makes you feel like maybe your spring isn't as busy as you thought.

What do microbes and fungi actually do for our soil and plant health? We talk a lot about the benefits of a diverse, healthy soil life. Probably the first and foremost benefit of healthy soil microbes is the decomposition of soil organic matter. Soil organic matter is basically all the organic substances in the soil, or in other words, anything containing carbon, whether living or dead.

Soil Organic Matter (SOM) can be divided into three categories

1. Microorganisms (The Living)

2. Crop residues (The Dead)
3. Humus (The Really Dead)

The really dead or humus portion is long term SOM that is resistant to further decomposition. It is hundreds or even thousands of years old. Of course, healthy biological soil will continuously be cycling, and humus is being created at all times. The dead is cover crop roots, cover crops killed and allowed to stay in the soil, and other digestible plant residues left in the crop field. The living is the current microbes and fungi that are living and digesting plant residues. Microbes need continuous supplies of dead SOM and plant sugars and proteins from growing plants to be as healthy as they can be and help the grower be more productive. The vast majority of soil microbes live under semi-starved conditions, which leads to a semi-functioning soil system. Another issue is when soil microbes become stressed, the types of biology present can change into less productive bacteria, which is not beneficial to your soil or your plants. SOM's molecular structure is mainly carbon and oxygen with some hydrogen and nitrogen and small amounts of phosphorus and sulfur. Soil organic matter is a by-product of the carbon and nitrogen cycles.

Carbon is extremely important for healthy soil and healthy crops. Carbon makes up the vast majority of a plant's dry matter, and plants need carbon in the form of Carbon Dioxide (CO₂). As microbes digest dead residue, they use oxygen (this is why it is important to have a loose/tilth soil with room to hold oxygen) and proteins (nitrogen), and they release CO₂. Plants above ground benefit directly from soil released CO₂. Higher levels of CO₂ will increase crop growth; this is why plants will grow faster with increased levels of soil CO₂. This is a fact. Okay, we want more carbon, but how do we get it? The atmosphere has some CO₂, and plants absorb it from the atmosphere as well as the CO₂ coming up from the soil. Plants then combine this carbon with the sun, water, and other nutrients. This creates sugars and builds a healthy plant in the photosynthesis process. These sugars that

the plants share through exudates into the soil then become food for the microbes along with carbon, nitrogen, and other nutrients, and the cycle continues.

The message to remember here is that if your farm's goals include building healthy soils and plants and increased crop yields, then the first thing to do is focus on soil life.

1. Having plentiful and beneficially diverse soil microbial populations is a must.

2. Increasing carbon cycling through cover crops, crop rotations, diverse soil amendments, and increased photosynthesis (the larger amount of green growth you have, the more photosynthesis that will occur if everything else is in order) will help build this diverse, healthy soil life.

The soil is a little like a wood stove. The more you feed it and tend to it, the faster and hotter it gets. If you do nothing, the fire will go out. Being somewhere in the middle is okay, but why accept that when it is very achievable to get your soils to be really productive. Since 2019 Fertrell has been offering two different beneficial biological packages. One is strictly bacteria based, and the other is a combination of bacteria and mycorrhizal fungi. At a reasonable cost per acre, you can use one of these products mixed with your fertilizer to ensure that you have the right kinds of microbes and fungi in plentiful supply in your soil. This, in conjunction with aggressive cover cropping and crop rotations, will absolutely be your least-cost way to have the healthiest soil possible capable of storing large amounts of carbon and additional nutrients for release while your crops are growing. Although it is cold today, soil temperatures will be on the rise soon—don't forget about microbes and fungi, your soil's most essential workers.



10% OFF during January

Fertrell Beneficial Biology

Contains our top blend of beneficial soil-based microorganisms including multiple species of plant growth promoting rhizobacteria (PGPR) and other beneficial plant growth promoting microorganisms (PGPs). This specially formulated blend enhances and restores beneficial soil microbe populations to augment the natural organic processes that occur in healthy soils. Available in 50 lb bags.

SPE 120 - Soil Plant Enhancer

Contains Beauveria bassiana, a natural symbiotic fungus that grows with your plants. SPE-120 uses this natural fungus to defend roots stems and leaves, from pathogens and insects. Recommended use of 2 oz per acre dry or 1 oz per acre liquid. Available in 6 oz liquid or 8 oz dry.

Fertrell Mycorrhizae Plus

This blend of beneficial soil-based microorganisms plus mycorrhizal fungi colonizes, nourishes and aids plant roots and the surrounding rhizosphere. This provides improved crop health, greater drought tolerance and mineral availability (i.e. phosphorus, nitrogen, calcium, iron and more) and more robust soil food web. Available in 50 lb bags.

Upcoming events:

Due to the ongoing pandemic, we currently do not have any events scheduled for 2021.

Our staff is still working remotely whenever possible, and travel is still pretty much restricted at this time

However, they are available to assist you Monday – Friday 7:30AM - 4 PM and can be reached:

General inquiries :

Nicole Benasutti Receptionist (will most likely be the one answering the phone) or info@fertrell.com

Customer billing:

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Orin Moyer ext 227 orin@fertrell.com (Mondays and Fridays only)

Production:

Brandon Williamson ext 258 Brandon@fertrell.com

Shipping:

Shipping@fertrell.com

If you are on one of our local delivery routes, please be sure to call your order to your Fertrell representative by the time and day indicated on your route schedule. Thank you for your continued business.

Manure - Can you afford it?
by Dean Painter

Manure is generally considered affordable and if you are a dairy, poultry, or hog farmer, you have lots of it and want to use it. Even if you don't have your own livestock, producing a ready supply of manure, most farmers use it on their fields. Applying manure to your fields is part of maintaining good soil fertility because it contains

nutrients, builds organic matter, and inoculates the soil with biology. This is one component of a typical sustainable soil management practice, but when farmers try to use manure alone, in place of fertilizers and soil amendments, growing goals and expectations are not met. The primary reason for this disappointment is that manure doesn't provide all that your soil needs to produce nutrient dense crops. Additionally, using manure can increase weed pressure and contain unwanted residues.



First let's look at the typical macro nutritional composition of various manure sources. These are identified in Table 1.

Table 1. Estimated Average Macronutrient Content of Manures

Liquid			
Pit Manures	Total N	P2O5	K2O
Dairy Cow	31	15	19
Beef Cow	20	16	24
Poultry Boiler	63	40	29
Poultry Layer	57	52	30
Feeder Swine	21	18	19
Solid Manures	Total N	P2O5	K2O
Dairy Cow	10	3	6
Beef Cow	7	4	7
Poultry Broiler	46	53	36
Poultry Layer	34	51	26
Feeder Swine	10	7	4

Sawyer, J. (2009, Jan 24). What are average manure nutrient analysis values? Iowa State University Agronomy Extension Soil Fertility Web Site.

The macronutrient values shown in Table 1 are averages. It is important that farmers know the levels of NPK in their manure, so that proper

application rates are used. When determining manure application rates, Phosphorous is the limiting factor. You can apply as much manure as needed to meet P requirements, but that will always leave a deficiency in Nitrogen and at times Potassium. Because of this Fertrell makes recommendations that balance these macronutrients and include the micronutrients needed to produce healthy crops. We generate our recommendations based on the results of your soil tests, nutrient value of the manure you are applying, and the needs of the crop being grown. This keeps your soil balanced and healthy, in a way that meets your immediate growing needs and promotes long term soil fertility.

But let's presume that a farmer does not heed that recommendation and applies more manure, enough to supply all the Nitrogen their crops need, planning to work the manure into the soil and figuring that "more is better" so some extra P won't matter. Eventually the soil will be so high in Phosphorous that it will tie up other nutrients and they will not be available to plants. The resolution for this issue is that no more manure can be applied, the farmer will need to meet nutritional needs by applying fertilizers that do not contain Phosphorous, until the P is used up and returned to a normal level.

The second drawback of the overuse of manure is increased weed pressure. This issue is a byproduct of unbalanced soil nutrition, which promotes the growth of weed seeds already in the soil. Additionally, many manures contain weed seeds from bedding materials. The increase in weeds is especially troublesome for organic growers and by closely monitoring the application of manure these weed problems can be minimized.

The final issue, unwanted residues, is a problem for farmers who purchase manure. When manure is not generated on your own farm it is difficult to determine what sorts of unwanted residues it contains. The three problem contaminants we most often see are herbicides, pesticides, and disease organisms. Herbicides and pesticides are harmful to soil bacteria and micro-

organisms, which decreases soil health. Diseases are especially concerning because they can have devastating effects on crops and long-term soil health. When buying manure in, you need to be sure of its source and that it doesn't include these unwanted contaminants before applying.

There are three key benefits of combining the use of manure with a complete fertility program.

1. Keeping your soil nutrients balanced, so they are available, can be used by your crops, and do not leach away or bind up chemically in the soil.

2. Producing more valuable, nutrient dense crops - for both animals and people.

3. Building nutritional reserves in your soil.
In this article, we have already discussed the first and most immediately detectable advantage - keeping your soil nutrients balanced. The second and third benefits take longer to notice, but are an extremely important part of developing sustainable farming practices

Let's look at the second benefit - producing more valuable, nutrient dense crops. If you have heard Jeff Mattocks speak, then you have heard him say it is less expensive to feed your soil and grow nutrient dense forages than it is to supplement your animal feeds with minerals. It's kind of a pay now or pay more later concept - and we believe you should invest in the health of your soil up front, by using a complete fertility program.

The third benefit - building nutritional reserves in your soil - is a very important, long-term benefit of using a complete fertility program. The dream of a farmer is to have fertile soil that has not been "used up" over the years. It doesn't have to be a dream; it can be a reality with this balanced approach and sustainable practices.

So, throughout this article I keep mentioning a "complete fertility program", at Fertrell, that's what we believe in and recommend. By using our standard blend fertilizers, our ability to custom blend fertilizers, and our component soil

amendments - you can take a balanced approach to your farm's fertility needs. If you are ready to implement sustainable farming practices, that will lead to your success, contact us to help you get started today.

News from the front:

A friendly reminder, that all Early order fertilizer must be picked up / shipped by March 15th 2021.

The Blue River Seed discounts will continue through April.



Blue River Organic Seed

Fertrell partners with Blue River to bring you discounted seed!

DISCOUNT	
January	4%
February	3%
March	2%
April	1%

Marketplace:

Certified Organic Soft Red Wheat seed;

Triticale seed and Rye seed. Josiah Kauffman, 149 Dairy Lane, Ulster, PA 18850, Phone: 570-637-1297

Organically Grown Garlic - \$10.00 per pound plus shipping. We have a mixture of varieties, including Porcelain and Purple Stripe. For quantity discounts, placing orders and shipping details please contact: Erich 845-663-4465 or email gippertsfarm@gmail.com

Garlic and Garlic seed - For information call 315-796-4370 or visit <https://ak-acres-101837.square.site>



Liquid 3-4-3

10% off during February*



Fertrell Liquid 3-4-3 is formulated to meet the nutritional demands of high producing crops in a liquid fertilization program or a supplemental drip program.



It contains good amounts of kelp and liquid humates along with the fish emulsion to provide a boost at planting time while increasing nutrient uptake and stimulating biology.

**Restrictions Apply*

Tracking Feed Consumption by Alyssa Walsh

Feed is an expensive and important part of raising livestock. I've talked to a number of farmers who don't know how much feed their livestock are eating. Why does it matter? Keeping track of how much feed animals are eating can give us an idea of how effectively they are converting feed to meat. The more efficiently the livestock convert feed to meat, the more successful you can be. Efficiency can be tracked by recording how many pounds of feed yields a pound of carcass weight. This is known as feed conversion ratio.

Feed conversion ratio (FCR) is the rate livestock convert feed to meat. For example, an FCR of 3:1 means 3 lbs. of feed was converted to 1 lb. of carcass weight. This calculation will help you understand how efficiently your livestock are at converting feed to salable meat. To calculate, you'll need to know the average amount of feed each animal consumed before processing and the average carcass weight. Once you have these numbers, the calculation is simple:

Feed Consumed ÷ Carcass Weight = Feed Conversion ratio

For example, 12lb. feed ÷ 4 lb. carcass weight = 3 to 1 FCR

Once you have the FCR calculated, compare your FCR to breed averages. It's also helpful to keep track of each group's FCR, so you can compare between batches on your farm. Below are some breed average feed conversion ratios. Please keep in mind, the below numbers are for livestock raised on pasture and fed corn/soy-based diets. Soy free and corn and soy free diets will have higher FCRs.

Broad Breasted Turkeys – 3:1

Heritage Turkeys – 4:1

Cornish Cross – 3:1

Robust White – 3.5:1

Freedom Ranger – 4:1

Most pigs – 3:1.

If your feed conversion ratios are off, then

you'll need to look at what's happening on your farm. What's your grow out period? After a certain age, livestock's feed conversion increases meaning they become less efficient at converting feed to meat. How much feed is being wasted? For poultry, you'll want feeder height at the average birds back to reduce spillage and waste. What are you feeding? Soy free rations will take more feed to finish a broiler or hog than soy-based rations. Do any adjustments need to be made to improve your ration? By-products that are used in some feeds help keep cost down, but can affect the quality of feed. Cheaper may not

always be better.

When planning for 2021, set up a system to track how much feed each group is fed. After the season is done, look at feed conversion ratios using the FCR calculation and compare to breed averages. If you're under the average FCR for your breed, that's great! What did you do right? How can you do it again next season? If your FCR is above the average, what can be improved? Is it because of waste or does a ration adjustment need to be done? Feed is extremely important and high cost, so make sure it's right.



We're not just Supporting Chickens

Ask about our Goat and Sheep Nutri-Balancers

We do **CUSTOM** feed formulations

10% OFF during January

- **Certified Organic Icelandic Kelp**
- **Millions of Beneficial Bacteria**
- **Need Copper for GOATS? It's in there.**
- **Loose Minerals for SHEEP? We've got you covered.**

Feburary Specials - 10% off

Fertrell Goat Nutri-Balancer

Our premier Goat Nutri-Balancer is formulated specifically for the nutritional requirements for all stages of a goat's life. Goat Nutri-Balancer is formulated with essential vitamins, minerals and trace elements to promote optimum animal health. It should be used with high quality grains and forages for maximum health and performance. Available in 50 lb bags.

Fertrell Sheep Nutri-Balancer

Sheep Nutri-Balancer is a premix vitamin & mineral supplement. A nutritionally complete premix with no added synthetic copper. Available in 50 lb bags.

Moldy Feed Tips by Dr. Paul Dettloff

With our climate change where we are getting more moisture and shorter sunny spells, I'm observing that we have an increase in molds in our feeds. I experienced a lesson in molds in my tincturing. Twice I tinctured moldy herbs unknown to me. Garlic bulbs with fusarium mold and echinacea plants with some white mold. When the finished product was measured for potency with a conductivity meter, their erg level was extremely low, almost non-existent, \$1,200 went down the drain each time. Mold has the ability to upset the balance of the microbes in the rumen. In a matter of hours due to the short life cycles of the many organisms. The first sign is usually a dysentery and disturbance of the microflora of the intestines. Some of these molds can even cause some hemorrhaging in the intestines.

What do you do for an animal with an upset digestive system from mold? First find the source and stop feeding it. Two treatments to do immediately would be a 10 ounce drench of Aloe C as that is gut friendly. Next put them on Detox Plus Boluses 2 to 3 twice a day for a couple days. I also recommend providing humates or reed sedge peat free choice. When an animal needs humates they instinctively look

for them and will lick a few tongue fulls. In fact, I recommend humates free choice all the time for livestock as a preventative. Animals will not eat humates every day. You may go two weeks without one touching it. Then on Wednesday, the entire group is licking on humates for some reason.

Humates are in the carbon cycle between a peat bog and coal. It feeds the healthy microbes that reside in the gut. If the farm is married to a big supply of moldy haylage, balage, or corn silage, then top-dress feed with Ration Boost, a powdered blend of Mistral Clay (binds to the mycotoxins), Reed Sedge Peet, and Apple Cider Vinegar.

I've also witnessed that if you encounter a switch of species in pasture life, turning them out into red clover, or opening a bag of corn silage, they will hit the humates. A change in the cellulose and hemi-cellulose will require different micro-organisms for digestion.

Treatment Tips for Effects of Moldy Feed:

Detox Plus Boluses or Bulk

Adult bovine dosage: 2 to 3 capsules (or ½ cup) twice daily for 2 days (longer if needed).

Top dress feed with Ration Boost

2 ounces for mature stock twice daily in TMR (for mature stock)

Bramble Management By Sage Dennis

Brambles are berry bushes such as raspberries and blackberries. Proper pruning is one of the single most important practices that you need to do to maintain healthy plants, increase longevity, and a consistently good yield. If the winter gets away from you and you did not end up pruning, old canes will fill up your berry patch, reducing plant vigor and yields. Maintaining good pruning practices, management, and cultivar selection can last more than ten years.

It is important to understand when your bushes bloom and on what part of the plant.

There are those that bloom from canes that were formed last year and those that bloom on the current year's growth. Most berry plants you are familiar with bloom on old growth. This is important to know, so you know if you need to leave old-growth or cut the canes down. Removing old canes on a bush that blooms on old growth means you will not see any yield that year. Older canes are typically light brown, brittle, and woodier.



Some benefits that could see as a result of pruning are. When you prune old canes that will not be used to support healthy plant growth more effectively, prune excess canes to help prevent overcrowding, which can increase airflow throughout the plant, which will help reduce disease pressure. Any damaged, diseased, or infected canes should be pruned right away. Also, keep an eye out during winter pruning to make sure the pest doesn't overwinter in your plant, and you have to deal with the following season. Lastly, make sure to prune to make harvesting easier! You are spending a lot of time making sure your plant is healthy, so be mindful of what will make harvesting easier later in the growing season and make sure the fruiting will happen at a comfortable height. Not all berry bushes can be treated the same. It is important to know your plant and the appropriate timing, depending on its life cycle. Some plants will need to be pruned in the summer; some plants will need pruning twice. It all comes down to the cultivar. Do not hesitate to contact us as Fertrell, and we will gladly assist you with questions you have about what will be the healthiest for your plant.

Fertrell Celebrates 75 Years Company History, 1946-2020

The Organic Development Company came into existence in 1946. The company was formed to provide an alternative to commercial blends of salt and acid based fertilizers. Mr. John Johnson had determined that his roses were not meeting his expectations: their endurance and fragrance were falling short of his standards.

As a result, The Organic Development Company was formed in Fullerton, Maryland, in Mr. Johnson's garage. He determined that by mixing plant, animal, and mineral compounds that his roses attained maximum performance.

The Fertrell Company is the oldest producer of organic fertilizers in the United States. Their reputation for quality and service is second to none. The growth in organic production over the past 70 years have helped the company continue to grow. The Organic Development Company relocated to the present site at Bainbridge, PA in 1961. Liquid fertilizers were added to the company's offerings in that year. Rufus Miller became sales manager for Mr. Johnson and began developing sales in the farming community, particularly among Amish and Mennonite farmers who have long appreciated the value of organic fertilizers. Much of our growth can be attributed to word-of-mouth advertising within the farming and gardening communities. In 1973, following the death of Mr. Johnson, the company name became The Natural Development Company. The name changed again in 1975 to The Fertrell Company. The name Fertrell is derived from parts of the words: Fertilizer - FER; Trace Minerals - TR; and Elements - EL. The Nutri Balancer feed line came into existence in 1974, when soil tests revealed shortages of nutrients in local farm land. Late in 1990, Mr. Miller decided to offer the company for sale. Three of Fertrell's employees, Dennis Nygaard, Reuben Gantz and David Mattocks, came together and purchased Mr. Miller's stock and the ownership of The Fertrell Company. In 1996, under the direction of Mr. Jack Robinette, the Fertrell Co. introduced Poultry Nutri Balancer. Jeff Mattocks, then-

Company Vice President and nutritionist, has successfully promoted this product across the United States. Dennis Nygaard retired in 1996, and Reuben Gantz retired in 2000. David Mattocks continues as the chairman board of Fertrell. Dave will never fully retire but he stopped coming to the office in 2012 at age 76. He continues to help in the training of new and old staff members by teaching the history and philosophy of the company. In 2003, Fertrell adopted an Employee Stock Owned Plan (ESOP). This was an ideal that would continue Fertrell for future generations of farmers and employees without needing to be sold to an outside entity. Fertrell continues to be employee-owned today. In 2017, construction began on a new warehouse and office building at the Bainbridge location. The project was completed in 2018 and has allowed Fertrell to expand both production and employment.

Fertilizers and Soil Conditioners

Fertrell fertilizers are biological plant foods, formulated to provide "time released" nutrients for your crops throughout the entire growing season. Fertrell plant foods are a unique combination of products which feed both plants and soil microorganisms. Fertrell fertilizers provide all the essential elements necessary for high-yield crop production and soil management. At Fertrell, we have recognized that the soil is a living organism - a vital and valuable resource. Our products encourage a living, well balanced soil. The development of Fertrell products represents years of research. We provide a complete organic and natural product in one package - a plant food and soil conditioner that stimulates and builds the soil while supplying the necessary nutrients for plant growth. Our goal is to advance sustainable agriculture with a strong commitment to profitable farming, healthy soils and optimal production.

Fertrell's Livestock and Poultry Supplements

Fertrell's vitamin mineral premixes came into existence in 1974 after our existing fertilizer customers urged the owners of Fertrell to make

livestock supplements. It was also recognized that forages and feeds no longer contained enough nutrients to sustain modern, high production breed performance, making the need for balanced, organic and natural vitamins and minerals all the greater.

Fertrell Nutri Balancers contain a blend of microbials, of kelp meal, trace minerals and the highest quality macro minerals available on the market. Our mission is to promote your animals' health so that they can perform at their fullest potential. It is our guarantee to you that we will continue to use high quality inputs to manufacture our livestock, poultry and specialty supplements.

Fertrell Fertilizers

Fertrell fertilizers are natural and organic blends that provide the elements required to build a healthy and productive soil. Through the action of soil microbes, Fertrell fertilizers provide plants with a complete ration of nourishment during their growing season. By using Fertrell fertilizers you are helping to ensure crop quality as well as crop productivity.

Fertrell fertilizers are a balanced plant food and soil conditioner that provide both macro- and micro nutrients to facilitate optimal growth. Fertrell products have a lasting effect with ingredients that release nutrients throughout the growing season, stimulating plant growth and soil life. Our products help your soils to become richer by:

- Feeding soil microbes
- Supplying trace elements
- Stimulating humus production

Fertrell uses only the highest quality ingredients available. Our blends are produced to meet the needs of our customers.

The basis of our products are animal and vegetable proteins and mined minerals, including blends of kelp, fish, feather and crab meals, sulfate of potash, and zeolite, among others.

We support certified organic, natural, biological, and sustainably-minded farmers and produce products according to their needs and specifications. Sustainable agriculture is our passion and expertise.





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