Solar Harvest Farm

Food and Energy - Produced with Conscience

March 29, 2018

Fellow Connoisseurs of Food Raised in Sunshine,

#### Farming in the Key of Life? Which key might that be?

There are 24 major and minor keys resonating our ears. Who's to say which of these resonates most with *life*? Ahh, but there's only one key with no sharps and no flats. I'm talking about the key that's...(wait for it)... *All Natural*!

Fortunately, musical theory isn't necessary to get the gist of it. The point is that there's a lot of *singing* going on in the supermarket organic aisle these days, all of which is giving consumers the impression - the perception - of being harmoniously sung in the key of *All Natural*. The corporate influence has induced economies of scale to Certified Organic, Grassfed and even Pastured, as products are now trucked long distances from southern climes on potentially any continent. The new kid on the block, Non-GMO, with it's allegorical butterfly, is capturing a stunning amount of market share, almost all of which is premised on a completely false perception of *All-Naturalness*. It is the egregiousness of this false perception which reveals, with certainty, the vulnerability of complacent consumers amidst a legalized predatory marketing paradigm. Consumers have indeed pounced on these offerings, apparently unable to resist the allure of one stop shopping.

Perhaps this is a good thing, no? - the dream of nutrient-dense, biologically-produced, environmentally-sound, humanely-raised, pasture-based proteins, now conveniently available, thanks to economies-of-scale?

It is to this question that much of this season's newsletter is devoted. In some respects, this is yet another rehash of labeling loopholes.

But new to this tired, dysfunctional conundrum exists a seismic twist of consumer influence:

The single attribute of *convenience* has in effect, thrown the entire paradigm of *Eating Local* under the proverbial bus.

This is so much more than a self-serving plea expected from the small, local farm businesses on the losing end of this stick. "Local" is not just another attribute vulnerable to the triage of grocery aisle decision-making. *Local* quite literally represents the aggregate of all the aforementioned desired attributes.

#### Local is the name of the Ecosystem in which all these attributes interact.

Just play the note... as it comes *Naturally*. This is what is meant by *Farming in the Key of Life*. It's not an ideology. It's not a *side*. It's not a humanely-decided *right or wrong*. The resonance of the natural world exists - farm with the notes which are in harmony with this natural resonance.

But what happens when we bend these notes to the scale of agribusiness and convenience of big box stores? Please read on to indulge further into this question as well as a general update of happenings on the farm.

#### 2018 Seasonal News

For the third consecutive year - no price increases. We're also continuing with the new Whole Beef pricing option which provides a substantial price reduction for those who either require more beef or are willing to find a partner to split a whole.

Pastured Chicken dates are now moved forward by two weeks, with all dates now in June. We've also reduced the number of chickens and harvest dates by 20%. You will find just one Saturday offering this season. The reasons for these changes will be addressed as you read on. Abbreviated: these changes have been induced by changes in climate as well as the marketing success of corporate pseudo-organic offerings, respectively.

#### **Looking Back - 2017 Summary**

Of course, we first have to look back on the influence of climate. The 2017 season started with another cold and clammy spring which then blossomed into perpetual wetness up through mid July, at which point, the rains stopped almost completely until Labor Day. Integral to these extremes, in early June, we were all subjected to extended days of abnormally high temperatures and dew points.

I often speak about the giddy spring optimism that commences each season. We all seem to recognize that this seasonal optimism is a rationalized form of lying to ourselves - a therapeutic acquiescence intent on deluding ourselves to believe we puny humans, as perpetual underdogs, can actually win one against the seemingly sadistic forces of Mother Nature! But looking back, it seems as if we've lowered the bar of expectations, now content to

accept the definition of a *successful season* as that being any season in which our optimism bubble has not been burst prior to mid summer. It's just not realistic to expect a full growing season to unfold without detrimental atmospheric extremes. Yet the pattern is unfolding in which this bubble is bursting directly out of the starting gate. Perhaps the *gamer* analogy best embodies the psychological effects, for if you just started playing the game yet have already depleted your potential, what's the point in continuing? A gamer can simply press reset and restart with fresh optimism. Obviously we don't have that option.

The extended cold and clammy pre-season is likely upsetting the normal balance of soil biology. Water-logged, heavy clay soils can induce unpalatable smells and tastes to forage. Rogue organisms are likely proliferating, effecting plant growth. Ingested by livestock, these organisms upset microbial balance impacting feed conversion and suppressing immune systems.

Of particular frustration has been the impact on new seedings. Since the purchase of the additional acreage in 2012- acreage that required a complete reboot to newly seeded perennial pastures - we have not yet had one normal spring. Hence, we have been forced to put expensive seed in the ground into conditions in which we know will be detrimental to germination. If we discover that our gamble paid off and the seed germinates in spite of excessive wetness, we are quickly disappointed when the new growth is stunted by excessive heat and drought. As a result, I've now thrown science in the backseat, instead opting for a shotgun approach to seed variety. When the seeder now hits the field, it is loaded with a much wider variety of seeds, hence increasing the potential that something will establish amidst forth-

coming conditions which cannot be predicted with any degree of accuracy. This throw-it-against-the-wall-to-see-what-sticks philosophy is working better than methodically planting orthodox varieties which have been successful elsewhere. This is my second season using this approach. While the pasture diversity is not yet where we need it, we are making progress.

In regards to cattle rotations on pasture, the wet spring and perpetual early summer rains derailed our grazing plan. Rotational decisions were based on proximity to high ground such that animals could be rerouted to higher ground to avoid damaging pastures. Amidst a normal season, we would expect to make six full circle rotations through all of the paddocks. Yet because of these back and forth gyrations influenced by rain and wet soils, we did not even have one complete rotation cycle through all the normal paddocks. This was unprecedented.

As they say, be careful what you wish for! We wished and wished that it would stop raining - and in early July - it did just that. Like a switch was thrown, it stopped raining all the way through the Dog Days until Labor Day. Soil moisture kept us going through July. But by August, regrowth wasn't meeting demand. On the home farm, we moved the herd back into the woods. At the Forty, we were forced to let the herd consume the hay-fields. As a result, we were unable to make a single bale of hay, now forcing us to purchase large amounts.

Oh, but it gets better! The early June heat wave arrived when the Freedom Rangers were approaching full size. Recall that we had re engineered our season to mitigate the effects that excessive heat has on pastured birds in July and August. We smugly thought we had implemented the best-case Goldilocks' environment. Instead, we landed in the midst of early, sultry tropical air. With dew points in the 70's and temperatures still revealing 82 degrees at 10 pm, a high percentage of birds were choosing to beat the heat by hunkering down outside the shelters.

Might be good to digress for a moment to make sure everyone understands the habitual behavior of chickens - that being that they always come home to roost. Once they are acclimated to a shelter, they always prefer to roost inside. Without this instinctive behavior, there may very well never have been such a thing as a domesticated chicken. Reason is that every nocturnal omnivore and carnivore on the planet seems to love the taste of chicken. Chickens become lethargic in darkness. Hence, for predators, chickens roosting outdoors represent a zero risk, delicious, guaranteed meal.

So back to the sultry June situation, imagine walking out at 9:30 pm to close the hatches on all the shelters, expecting the birds to be inside, only to find hundreds of birds scattered throughout the field. Understand that you can't herd chickens nearly as good as cats! Understand that the behavior demonstrated by chasing chickens in the dark is frustrating enough to perhaps even make Mother Theresa cuss like a sailor! They run anywhere and nowhere, like buzzed chickens, three sheets to the wind. Regardless, it's a tall order to be chasing chickens till



11 pm. We did this for a few nights, expecting the sultry air would pass. When it didn't and the birds began to habituate to field roosting, we threw in the towel. We knew this may turn into a feast for the owls and raccoons. At the same time, for the first time in over 20 years of offering pastured chicken, we also knew that a large number of birds remained unsold only a few weeks away from harvest - this now being the segue explaining the reasons for reducing our offerings this season.

We are not established as a CSA. In most CSA formats, supporters pay the farmer in-full in early spring, accepting the same risks as the farmers. The bounty received is proportional to the bounty induced by Mother Nature. Some seasons may provide abundance whereas others may provide little - all for the same supporter investment. Equally important to the farmer, the CSA format takes much of the guesswork out of the concerns related to the type and quantity of offerings as this is learned early in the season.

Instead, we operate in the field-of-dreams format - with that godly voice whispering in the wind *if you build it, they will come*. In 2017, we built it - and an influential number of people - didn't come. This was the case for chickens, beef and pork with the only exception being that demand remained very high for pastured eggs. As would be the case if you yourself were in our shoes, our first thoughts were related to quality. Something was wrong? Some environmental variable associated with growing conditions from the preceding season must be in play? Yet that didn't add up either, as both ourselves and a large number of extended family members consume our products with none of us experiencing any anomalies.

So I dug deeper, inquiring with anyone willing to provide feedback from 2016. Gradually, the mystery began to unfold. There were two consistent responses which I received from non-returning supporters. There was not one case in which anyone had any concern with quality - in fact to the contrary. The number one reason for not returning was "I can now find similar products at my local store". The number two reason represents the uncanny coincidence in which many households concurrently entered the empty-nest stage, of course inducing the effect that they now require less food. Over the course of the season, I

It's an unsettling form of "relief". The ship was taking on water. We're relieved to learn that we didn't pilot the ship into dangerous waters. Never the less - knowing this doesn't stop the ship from taking on water.

crossed paths with other farmers operating in the

same format, learning that we were not alone.

The empty-nest effect will have to be met by finding new supporters. Not simple, but capable via nose-to-the-grindstone efforts. However, the issue of "similar products" now being offered in the big box stores represents a formidable challenge.

For quite some time, corporate brands were dismissive or indifferent to-wards micro-niche offerings. Yet over just these past few years, the corporate stepping stones heading towards these niche markets have rapidly multiplied. There was first an easy willingness for corporate brands to jump to *All Natural*, as in doing so, required almost no additional effort or expense. The legalese behind the Natural label requires nothing organic yet induces the perception of *organicness* to a captivating segment of consumers. Low hanging marketing fruit, indeed. Likewise with marketing chickens in large print as being *Free of Hormones and Steroids*. This too is legal, as long as somewhere on the package exists the disclaimer stating *it is illegal to produce chickens with Hormones and Steroids*. Even when this disclaimer is provided (which appears to be poorly enforced), it is found in a nondescript location in such small font as to be almost unnoticeable. Hence, another corporate marketing freebie requiring no changes to husbandry yet effortlessly capturing higher margin marketable *organicness*.

This analogy of stepping stones has been lacking the perspective of intended corporate direction. I think it's clear that there's always been a raging ideological river isolating the conventional mainland from the organic island. In the conventional, corporate mind set, the organic island was inhabited by isolated lunatic farmers amidst eccentric well-healed organic consumers and misguided altruistic elitists. In this sense, there's no evidence that corporate niche offerings such as *Natural* and *Hormone Free* were ever thought of as stepping stones across the divide. Given the derogatory dialogue often imbued by these entities, they had no intention of crossing this divide. The *Natural* stone was right next to shore - no turbulence - no risk - easy money - no shareholder pressure to jump farther.

That game has played out. Corporate interests are no longer content to stand next to shore on the *Natural* stone, not when there now exists a multitude of stepping stones en route to the high margin organic isle (aisle) - high margin, that is, if the labeling definition can be exploited. Each one of these now highly coveted stepping stones - Certified Organic, Grassfed, Pastured, Non-GMO - are now being offered in big box stores with each niche containing loopholes large enough to push

a CAFO through.

#### **Placing Trust in Claims and Labels**

This topic is a continuum to the Non-GMO pages found within this newsletter. If you have not yet visited the pages titled Non-GMO vs Certified Organic and The False Premise of Butterflies in Harmony with Non-GMO's, please do so, then return here for further reflection.

I've long noticed that all of us, as consumers, hold different ethical standards when dealing with corporate brands vs a mom-and-pop business. For example: It is humanely impossible to read 500 words of ultra-fine print flashed on a TV screen for three seconds amidst the cacophony of a professional fast-talker. We know full well that the devil is in those details - we know that there's likely a catch - maybe even a trap - but we subconsciously feel that's just the way it is. How about the omnipresent "check here to agree to terms & conditions". Why bother reading if the failure to agree to any e-commerce stipulation, no matter how egregiously one-sided, boots you out the e-door onto the e-street?

Now imagine how you would feel if we pulled these shenanigans when you arrived at our farm to pickup your order? The guilt I would feel coming face-to-face with people who trusted me yet just realized that I had knowingly, willfully deceived them by skillfully diverting their attention or burying important details in ultra-fine print. Would you think that's just the way it is and continue supporting us? I highly doubt it.

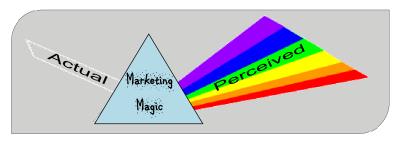
Perhaps the attribute that most aptly personifies these differences is that of the Golden Rule - treating others the way you would expect to be treated. It really is golden in that this one statement is a reflection of symbiotic empathy toward and emanating from others. Let's agree that only naivete or a bad case of idealism might induce us to believe that corporate-speak would be governed by the Golden Rule. Instead, if we are wise, we apathetically accept corporate potential as predatory, and as such, like chickens in the field, go about our business while carefully watching for predators.

It is both disappointing and disturbing to now witness these deceptive marketing tactics being used within the farm-direct community of businesses. The lead thought in my mind is one of "excuses", which troubles me as I recognize the peripheral influences that are stimulating this bad behavior.

The influential periphery can now be found in almost every big box store across the country: Sudden and rapid corporate participation within the niche markets of Certified Organic, Pastured and Grassfed. COOL is no longer providing transparency (Country Of Origin Labeling). Consumer regard for standards and accountability are shrouded in the darkness of international trade. Most disappointing, has been the realization that the very consumers who literally created these niche markets through their own research and demand for accountability to very specific standards - have now thrown all caution to the wind at the alter of price and most notably - convenience.

There has always been one absolute within the marketing plan of every small farm: A small farm absolutely cannot compete with the big box on price nor convenience. Over these many years, I have watched with interest, those farms that have priced their product competitively with the supermarkets. These farms are either dependent upon off-farm income, or, are no longer farming. The "excuse" for unethical behavior now on behalf of the small farm enterprise, is now the defenseless posture associated with being backed into a corner. Hence, if you can't beat-em...join 'em.

The problem with the acceptance of this rationalized excusive behavior is that the actions of a relatively small percentage of farms will compound, effectively bringing down the balance. A house of cards, indeed.





One of the winter chores of a farm such as ours is the necessity of annually evaluating one's competitiveness to similar operations. This process is far from cut-and-dry as the variables include essential attributes which greatly influence a farm's pricing. Hence, if I see a farm's pricing to be considerably lower than ours, I immediately dig deeper, attempting to learn the two greatest influences on a farm's bottom line. These primary influences are feed and format. Read these, then peek over the farm fence of your farmer or trusted label to see if reality matches your perceptions.

Feed Claim: Conventional This lowest price feed is indicative of it's status as a ubiquitous commodity, produced with the conventional pantheon of chemicals. Conventional feed may very well be a blend of GMO and Non-GMO grains. Regardless, when "conventional" is used as the feed description with no further claim being made, this feed is most certainly produced with the agribusiness orthodoxy of chemicals and synthetic fertilizers.

Feed Claim: Non-GMO This new niche is identical to conventional with one exception. The difference is relegated exclusively to the use of Non-GMO seed. Unless the farm is explicit in combining a Non-GMO claim with a claim of Certified Organic, (which would be redundant as Certified Organic disallows GMO's) then the conventional pantheon of chemicals and synthetic fertilizers are utilized. Given the fact that GMO seed producers have promoted their biotech product to require reduced applications of herbicides and pesticides, Non-GMO products may actually exhibit higher concentrations of chemical residues. The farmer *may* be paying a higher price for Non-GMO feed, but only due to niche status and subsequent need for segregation. From the consumptive aspect of Non-GMO feeds, perceived consumer food safety benefits are contingent with a consumer's beliefs regarding this most contentious issue. (Again, see additional pages on Non-GMO's, Chemicals and Butterflies found later in this newsletter).

**Feed Claim: Certified Organic** The soil in which the seeds were grown had been farmed without the use of chemicals or synthetic fertilizers, in accordance with extensive organic standards amidst a third party auditing authority.

Note: If this were a web blog which allowed comments, it is at this point that a troll would surface, denouncing the shortcomings of the organic program. This then becomes part of a circular argument. It is clearly understood that corporate influences have exploited the USDA Organic process. (This is the dagger which is addressed on the next page.) To no small degree, this concern had (intentional past tense) put wind in the sails of small farms, who are accountable because the consumer experience is direct and consequentially, transparent. Hence, in the context of this discussion, a circular argument. We are small. We are local. We are accountable to and directly inspected by the end consumer.

Feed Claim: Farmer Certified Organic Aka "Our farm is not certified organic, but we practice organic principles". This claim is only as good as the integrity, transparency and reputation of the farmer. In regards specifically to the feed, consumers can substantiate this claim by asking if the feed was produced on soils which were not treated with conventional herbicides and pesticides. Given that livestock feeds are a TMR (totally mixed ration), incorporating various grains, legumes, minerals and perhaps other additives, this question would have to be applied to all ingredients in the TMR. A noncertified farm practicing organic principles which has a land base large enough to grow it's own feed is the most likely example to farm in this manner. Yet most farm-to-fork enterprises have limited land holdings, as such, allocating all of their land resources towards the production of pastured livestock. If a farm chooses to purchase feed from a local farm while at the same time claiming Farmer Certified Organic, it is imperative that these grains are procured, not from a conventional farm, but from a farm which

does not use chemicals. This should raise eye-brows as there's no middle ground. To be successful at producing row crops without chemicals requires years of soil preparation and crop rotations. This is not as simple as avoidance of chemicals. Without organic preparation and without chemicals, these fields will quickly succumb to weeds with substantial deductions in quality and yield. The point is this: Perhaps the farmer making this claim is lucky enough to have a genuine organic farming neighbor who is willing to sell them genuinely organic feed. If this is not the case, this claim of Farmer Certified Organic can only be validated by showing receipts for the certified organic feed the farm purchases from a certified organic feed supplier.

Our farm operates as a hybrid variation of the latter claim. Our farm, as a whole, is not certified organic but we do practice organic principles. Our fields are never treated with herbicides, pesticides or synthetic fertility. Our livestock are outdoors with feet directly on soil. We grow our own organic nitrogen by feeding the symbiosis between soil microbiology and a diverse array of forages. The animals which are capable of metabolizing and thriving on an exclusive diet of forage (ruminants) are fattened on lush rotationally grazed pastures and hay without grain supplementation. Our monogastric livestock (pastured meat birds, laying hens and hogs) which by by their metabolic nature, cannot subsist on forages alone, are fed Certified Organic Feed. Hence, if we were to claim our feed to be Farmer Certified Organic, we can easily validate this claim via the presentation of a multitude of invoices. We are putting our money - your money - where our mouth is - and where all our mouths will be when we all consume our products.

Make or buy, feed is the primary expense on a diversified farm. We are spending significantly more for certified organic feed. Our feed is certified organic by M.O.S.A. In so many ways, our methods actually transcend certified organic found in stores. This is what some other farms are also trying to illuminate. It is the forte' of the smaller, local farm, to do MANY things that transcend store bought corporate certified organic. However, making the claim of farmer certified organic when, of all things, the feed is produced with chemicals, is gross misrepresentation. If one farm is actually paying for expensive certified organic feed while another is not, but is perceived to be by it's customers, the honest farmer is driven from the market.

# Getting Answers - By Asking the Right Questions

Apples and Apples or Apples and Oranges? So many variables. So many questions. So many potentially self-serving answers. And now, more than ever, so many options at the supermarket.



The concept of "locally-produced" was at one time considered the gold standard to food conscious consumers. It now appears that this may have only been circumstantial. Until recently, the supermarkets weren't offering some of the products produced locally. Pastured eggs and Grassfed Beef are perhaps the most glaring examples. For a growing number of consumers, convenience and price now trump local - especially if the consumer believes the products are comparable. Once "Eating Local" has been thrown under the proverbial bus, the consumer is left at the mercy of labeling.

From within the idealistic perspective, one could have logically presumed that locally-produced was untouchable. It's hallmark was transparency. It's barometer was integrity. Recognizing that, when illuminated in it's most innately human, Maslowian form, the very genesis of the alternative food movement has always been built upon fear. Our economic environment is predatory. Our fears reflect our concerns for our family's safety and wellbeing. In this respect, *locally - produced* was the manifestation of peace-of-mind.

So there you are, alone in the super-Unless you are armed with the results sive research or have a

sive research or have a knows how to spot a decepchicken standing alone in a sults of your own extentrusted farmer in your back pocket who tion, you are no better off than a field circled by hawks.

market aisle.

#### Do Food Decisions Have to be THIS Difficult?

If you boil your decision down to just one word, you eliminate the need for much of that research or back-pocket farm knowledge. That word is *scale*.

Too-good-to-be-true for pastured, grassfed and organic products? A seat-of-the-pants assessment envisioning the *scale* that would be required to supply the multitudes of Big Box franchises reveals that these corporate offerings fall directly into this category. Most food-conscious consumers abhor crowding and monocultures. Envisioning the scale necessary to meet mandated Big Box demand illuminates these foundational concerns.

Envision 5000 hens "on pasture". Imagine how rapid that pasture would be depleted. Imagine how this pasture would look amidst heavy rains. Imagine the frequency and labor necessary to move this many hens. Imagine the acreage required. And at what selling price could the farmer actually net 50 cents per dozen for labor? The \$5/dz retail price first begins to pay the retailer, distribution and corporate parent. The "partner" farmer, who assumes all the risks, endures the cost to grow or procure feed, raise pullets and pay for housing and overhead - all of which easily transcend \$2/dz on pasture - is left to accept the balance for labor.

Pastured Flock Size	Flock Dz / Year	Hypothetical Net \$/Dz (after all costs)	Yearly Net Income
5000	100,000	\$0.50	\$50,000

In this example, you do need the farmer to provide the expense details. But do you need a farmer to envision 5000 hens on pasture? And what of the ethics? - the environment and humane aspects?

In full reality, the pullets (young pre-laying hens) are raised indoors in high density. They are debeaked for only one reason: stress-induced cannibalism because of overcrowding. The bragging rights about "space per bird" do not pertain to the first five months of their lives. They begin laying during their 5th month of life, lay for 12 months, then are killed and sent to landfill at their first molt. And yes, as long as the kill meets "humane standards", a farm can wear the certified badge of "Humanely Raised" on it's label. The industry term is called depopulation. The approved humane euthanization process involves scaring thousands of hens to one end of the building where they are suffocated amidst an aspirated foaming agent.

#### Still left wondering why this is all allowed?

I'll attempt to summarize by illuminating recent regulatory influences to symbolically *bookend* the agricultural regulatory environment:

The new USDA director recently withdrew the Final Ruling known as the Organic Livestock and Poultry Practices (OLPP). In a nutshell, the OLPP rule, years in the making, outlined specific organic standards relevant to humane treatment, livestock environment and stocking densities. The OLPP ruling enjoyed 99% documented feedback from organic farmers and consumers. The ruling was directed at eliminating organic loopholes. Henceforth, producers could no longer structure a CAFO operation as "USDA Organic" simply due to organic feed consumption and lip-service evidence of pasture. The withdrawal of the OLPP has been praised by conventional agribusiness who argued regulatory overreach, stipulating that husbandry practices are best in control of producers, not government.

Conversely, Wisconsin's most recent regulation of agriculture has singled out small scale farmers, designating a flock of 150 chickens as "Large"\*, and consequentially, requiring producers of such to obtain a Food Processing Plant License.



★ In context, 500,000 layers in one CAFO is commonplace. Furthermore, the EPA specifically defines Large and Small Layer operations as 30,000 or more and 9000 or less, respectively.

The Effects of Government Regulations on Agriculture...

Inversely proportional to farm size.

Large = Less Regulation | Small = More Regulation

#### **Organics 101**

The start of this season has an unsettling feeling to it. Changes in climate have forced us to start early. Transcending even these unpredictably momentous influences of nature lies the recognition that this market - farm-to-fork - may very well now be on life-support.

As I look back over the past decades in which we have been involved with alternative food and energy production, I recognize the many foundational influences. Perhaps the first person of our time to square off with society was Rachel Carson- astutely grabbing us by the shoulders, shaking us, begging us to pay attention. Silent Spring was much more than an expose' of DDT. It laid the groundwork in reminding us that the aggregate of life is much greater than the sum of all it's parts. Carson spoke of the radiomemetic effects of ubiquitously-used herbicides and pesticides. As a biologist, she recognized technology was outrunning society's headlights - imploring us to first fully understand the amazingly complex functions of a *single* human cell. Carson recognized that sanctioned life-



changing decisions are made amidst an era of specialists each of whom sees his own problem and is unaware of or intolerant to the larger frame in which it fits. She implored us to question the ethical and scientific basis of establishing permissible exposure limits amidst the yardstick of almost-but-not-quite-fatal. Carson framed this in the backdrop of a new word - bioaccumulation - with science proving the bioaccumulated presence of carcinogenic chemical residues in the fatty tissues, urine and breast milk of human-beings.

This was 1962, yet a half century later, the list of concerns has grown far beyond chemicals. Today's largely self-educated consumers are concerned with antibiotics, hormones, monocultures, livestock density, humane treatment, essential amino acids, environment, biodiversity, genetic modification, carbon sequestration, sustainability and locally-produced.

Looking at this list, there is only one which is not a grievance, but rather, a form of grievance mitigation. *Locally-produced* doesn't imply that this list of grievances does not exist locally. To the literate consumer, locally-produced has been the only means of assuring that their concerns have indeed been addressed - not because of trust in a label - but because they themselves could physically validate that their concerns have been addressed. In effect, locally-produced enables transparency. Transparency enables peace-of-mind. Eliminating environmental liabilities inherent to global sourcing was just icing on the cake.

I think that the small number of existing farms which are already established will continue to be be active. They will adjust numbers or indulge in the likes of heritage breeds, agritourism or other micro niches. These existing farms, like our farm, will remain successful, but only because of their maturity - the expensive assets obtained in earlier years now bearing fruit. However, having survived those formative years, it is also apparent that, had this corporate paradigm shift occurred amidst those asset-building years - we would not have seen our way through this turbulence. This is to suggest that new entries in Farm-to-Fork may find it very difficult to establish themselves amidst dwindling consumer interest in the Real McCoy.

Someone once popped into my mailbox to provide unsolicited feedback. All she typed was "you are an idealist". There was no cloak of anonymity or invectives. It was signed-nothing else said. Still, the message received was: Get real. But this is the hidden beauty of idealism. It's not that people are saying "it's not possible". What idealism implies is this: It's possible, but don't hold your breath. Idealism - as a contagion - can rapidly become realism, but only if enough people are willing to inoculate themselves in it's potential. Society seems to be waiting for the perfect solution, allowing perfect to be the proverbial enemy of the good. Meanwhile, while society waits for "perfect", here's over 20 year's of hands-on experience demonstrating what IS working, not perfect, but very, very good:

Solar energy produces heat, hot water, cooks food and all other electric needs for a home and farm business; Solar energy powers farm utility vehicles; Solar energy powers two electric vehicles (Chevy Volt); Solar energy pumps home and farm water needs; Wind energy supplements solar; Efficiency, conservation and intrinsic energy are integral to design; Brooder heat is predominately intrinsic and solar; Synthetic herbicides, pesticides and fertility are neither used nor required. Diverse perennial pasture mitigates annual tillage energy; Biological soil management induces home-grown nitrogen; Livestock diversity enhances soil; Grazing mitigates mechanical harvesting; Perennial pastures sequester carbon; Healthy, balanced soils yield healthy, balanced foods; Pasture-based husbandry induces essential fatty acids; Preventive healthcare, via nutrition, mitigates expensive defensive cure; Local produced induces a local economic job-creating stimuli.

There is deep-seated antipathy towards this potential, which, outside of the political sphere, makes little sense. This alternative means of producing food and energy puts people back in control of their most important needs. It is only within the political sphere that we recognize motives - the reason our congressman referred to electric vehicle incentives as "money wasted on losers" or the reason the PSC has allowed We Energies to disincentivize grid-tie solar. We are quite literally allowing our representatives to protect vested interests at the expense of our own ESSENTIAL foundational needs. But this too is misleading in that it pins all the inertia on vested interests. It's abundantly clear that most people enjoy and prefer the status quo. We are in effect, enabling our own future crisis. Yet to a lot of people, even the mention of impending "crisis" represents nothing more than Chicken Little buzzkill.



It would be unrealistic to suggest that everyone is going to willfully give up the buzz induced by our current fossil-fuel lifestyle. In it's own contemporary light, with indifference to the larger frame in which it fits, we kick-the-can. The question of crisis or consensus cannot be imposed on a society which, under the intoxication of oil, is unaware or intolerant to even the suggestion of the impending need for alternatives. Hence, proponents of change are considered *losers* and *free-riders*. Society is thinking myopically: Solar electrons are free-riding the electric grid. Electric vehicles are free-riding road costs. Agribusiness will feed the world.

We can debate the one-sided nature of these statements till the cows come home. But let's not. Let's look at the bigger picture. Let's look at the faces of those young adults presently graduating from high school and college. In only ten or twenty years, what will be their circumstances and what will they wish we would have done differently today to have mitigated those circumstances?

Not everyone needs to be a cheerleader for alternatives. However, SOME people have to be working diligently on alternatives - unimpeded and yes, even incentivized. This is no longer a world in which seismic change can be induced by sheer ambition and innovation. Vested corporate interests are now legally "people", who with one massive thumb on the scale, will continue to suppress alternatives with complete and utter indifference to essential future needs.



Meanwhile, what to do about that Eat Local carcass lying under the proverbial bus? We - not the self-serving we, but the entire food/energy conscious community - can only hope that it's a momentary lapse of judgement. These corporate products were previously unavailable, the convenience alluring, the self-delusion subconsciously rationalized. We understand that committing to big box scale undermines core principles. We know that truth cannot be assured from a label. We recognize that "local" can not be mass-produced - that local is indeed, the Ecosystem of our Desires. To be sustainable, all participants - from the producer's farm to the consumer's fork - need to have skin-in-the-game. Supporting a local farm requires additional time and planning. Consumers put skin-in-the-game when they accept this inconvenience as being integral to achieving their desires.

#### At a deeper level, we're all Human.

As such, we understand our humanness evolved on naturally-derived nutrients - nutrients which for millennia had resonated in harmony with our soils and our cells.

We can't obtain this resonance from biologically dead soils or the almost-but-not-quite-fatal implications of yield obsessed agribusiness.

Foods which resonate in the Key of Life.. have to come from places that Farm in the Key of Life.

From all of us at the Heyer Family Farm - Steve, Michelle, Richie, Sheri & Sarah - Thank you reading and hopefully, your support through another adventurous, skin-in-the-game season!





VS





## Many people believe Non-GMO is equal or superior to Organic.

If you happen to be one who believes this, please read on.

- © Non-GMO labels and farmer claims of Non-GMO feed are EXCLUSIVE to the SEED with indifference to chemicals.
- ② Non-GMO claims are unregulated. Without evidence of third party verification, there is no accountability.
- ② Non-GMO grains used to produce livestock feed and food products were treated with herbicides and pesticides.
- There are over 100 herbicides available to both Non-GMO and GMO farmers.
- ② Rates of chemical applications are potentially higher with Non-GMO methods.
- Non-GMO feed and food products contain similar, if not identical chemical residues as GMO products.
- Some chemicals applied to Non-GMO crops leave systemic residues (cannot be washed off).
- These chemical residues bioaccumulate in the fat of chickens, hogs and cattle consuming Non-GMO feed.
- © Glyphosate, aka Roundup, is used ubiquitously with both GMO and Non-GMO crops.
- © Glyphosate is commonly used for whole field *burn-down* prior to planting.
- The burn-down process used by both GMO and Non-GMO produces a lifeless scorched-earth appearance.

Are you okay with feeding your family foods produced on chemically-burned lifeless soils?

Are you following the increasing concerns associating Glyphosate with health issues?

Are you aware that Glyphosate residues are now found in human breast milk and urine?

Are you familiar with the history of the likes of 2,4-D, Atrazine, Alachlor and Dicamba?

Are you aware that research has proven and measured chemical residues on a multitude of foods?

## How can you avoid GMO's AND Chemicals?

# Support Farms and Brands that utilize Certified Organic feeds.

Certified Organic has never allowed GMO's, synthetic herbicides or pesticides.

### **Purchasing Decision Guide**

#### In the Supermarket:

If the label states Non-GMO with no further redundant claim of Certified Organic, the grains used to produce that product were produced with conventional herbicides and pesticides.

#### At the Farm:

If a farm is claiming Non-GMO feed (or Conventional feed) with no further claim of Certified Organic, it is HIGHLY likely\* that the farm is using feed that was produced with synthetic herbicides and pesticides.

\*If the farm were to actually be growing it's own Non-GMO crops under the exact protocol of Certified Organic, it is also highly likely that this farm would be displaying "Organic" on their labels and literature. The combination of verifiable claims of Organic with the claim of Pastured is considered by many as the gold standard. In this combination, Organic adds substantial value in the eyes of many consumers while at the same time imposing added expense upon the farmer. Hence, if the farmer is certified organic, or, is devoutly using identical organic methods, this farmer will proudly embellish this added goodness.

#### Isn't there a chance that the farmer may not actually be using chemicals with their Non-GMO claim?

The variables in farming are seemingly infinite so ask your Non-GMO farmer this very question. However, enter that conversation with the understanding that weed control has forever been the bane of farming. Few, if any farmers, can switch off the chemicals cold turkey without realizing substantial reductions in yield and quality. "Non-GMO" is not a new category of seeds. Non-GMO is actually referring to the same hybrid seeds which have been used since the 1930's. Since this same time period, diversity gave way to monoculture while weed, pest and fertility inputs were concurrently derived from synthetic chemicals. These chemicals severely damaged soil biology, further aggravated by inadequate rotational diversity. As such, it now requires many years to transition these depleted soils to perform without chemicals. If a Non-GMO farmer tells you they are producing Non-GMO without chemicals, but is unwilling to claim organic, raise an eyebrow and ask lots of questions - as this claim may very well be one-in-a-million.



The false premise of

# Butterflies in Harmony with Non-GMO's



These logos have become the de facto face of Non-GMO verification and marketing. A full tour of the Non-GMO Project website ( www.nongmoproject.org) leaves the strong impression that this third party verification process is indeed legitimate. In this respect, these trademark labels send a message of trust to any consumer wishing to avoid purchasing genetically modified products. Yet by design, these labels are also sending a very powerful visual message to consumers: *The message of harmony between Butterflies and Non-GMO's*. In reality - that being from the butterflies perspective - Non-GMO methods induce the same collateral damage to butterflies and their habitat, as GMO's - if not even more so.

Non-GMO methods have every potential to be just as harmful to butterflies as those farms which utilize GMO seedings. While science has yet to identify and isolate every influence between genetically modified plants and butterflies, there is one component to which research has consistently illuminated as an antagonist to butterflies: Herbicides and Pesticides. This begs many questions, first and foremost being: What exactly is it about GMO products that consumers are expecting to avoid?

In the context of the relationship between plants and butterflies, a brief GMO primer is warranted - brief because there is just one component with the potential to have been genetically-modified: **The Seed** 

#### Genetically Modified Seeds (aka GMO's)

Most GM seeds are modified for herbicide resistance. Integral to this engineering is a proprietary aspect. The biotech company's proprietary seed is designed to be exclusively resistant to that same biotech company's proprietary herbicide. The most notable herbicide to which the seed has been engineered to be resistant is Glyphosate, known also by it's trade name of Roundup. Biotech seed companies market these GM traits to farmers by promoting two primary advantages. First is that farmers can confidently apply herbicide directly to the crop at various stages of growth without doing harm to the crop itself. The second is the claim that the farmer should consequently recognize diminished applications of herbicide.

#### Non-Genetically Modified Seeds (aka Non-GMO's)

Unlike the narrow category of proprietary seed noted above, the Non-GMO description is perhaps most aptly described as *every type of seed other than the above*. Keeping this in the context of modern agriculture and butterflies, what Non-GMO most accurately depicts is the typical agribusiness practices used by conventional farmers for the past 70 years - that being the dependence upon synthetic chemicals for fertility, weed and pest control. In this respect, aside from the Non-GMO traits of the seed itself, all other aspects associated with fungicides, pesticides and herbicides are similar, if not identical, to GMO plantings. In fact, if we are to put stock in the biotech claims of herbicide reductions, Non-GMO plantings may very well be subject to higher levels of chemicals antagonistic either directly to butterflies or indirectly by harming the plants which sustain butterflies.

#### **Summarizing What We DO Know**

Non-GMO agriculture applies herbicides at the same level, if not more so, than GMO plantings. Butterflies and their primary food source are both harmed by herbicides. Research reveals systemic herbicide residues on a multitude of staple consumer products. The Non-GMO Project verification is completely indifferent to herbicides. Consequently, even with the Non-GMO seal of approval, the same chemical hazard exists for both the butterfly as well as the person consuming Non-GMO products.

#### Full Circle: What exactly is it about GMO-produced products that consumers are expecting to avoid?

From this organic farmer's perspective, the GMO concern has always been directed first at the biological implications to soil and field organisms. This concern parallels the reasons for farming organically. We KNOW that conventional inputs (fertilizers, herbicides, pesticides) are antagonistic to life. We KNOW that these inputs are detrimental to environment, nutrition and well-being. But there is also a cultural/political aspect which is anathema to some farmers. This aspect recognizes the proprietary corporate control inherent with GMO seeds which effectively - legally - sanctions corporate trespass and prosecution of farmers largely at corporate discretion.

Is there a "Franken" element to GMO plantings which gives reason to believe the actual food product is unsafe? To date, there is no evidence that this is the case. The health and safety concerns that have been documented have implicated the herbicide used with both GMO and Non-GMO plantings. Nor is the supermarket the most likely place to find a "Franken" concern. It is the biologist to whom we must place our stock in assessing this potential. In some respects, a person may not even need a professional assessment. Recognize what a GM seed is: It is an organism which has no precedence in the natural world. It represents the biological integration of otherwise impossible breeding - crossing potentially any/all biological barriers between Kingdom and Species. There are no rules. There are no ethics. The number of potential biological interactions are - for all intents and purposes - infinite. This genie is out of the bottle - forever - blowing the wind, drifting and landing, drifting and landing.

Given the element of earthly time vs infinite evolutionary potential, it is egregiously disingenuous for biotech proponents to claim *no evidence of harm to the environment*. Evolutionary changes are recognizable only over vast amounts of time whereas these biotech anomalies have to date, had just 20 years to wreak potential havoc. Given the direct assault on the soil, it is logical to suggest that the soil food web is most vulnerable to these anomalies. Considering the astronomical population and diversity of this soil food web - much of which has yet to be discovered - we may never know what future revelations were naturally-derived or which were induced by biotech. The effects could be trivial, or, the effects could produce a pathogen capable of overriding the human immune system with no antibiotic capable of stopping it. This is the Faustian bargain we stumbled into amidst the self-serving premises put forth by Monsanto.

But now you ask: Haven't I just made the case for the Non-GMO Project? This depends upon why you are inclined to reach for the package.

If you ONLY seek the removal of GMO's yet are indifferent to the effects of chemicals on your food, butterflies or the environment, then the label works for you.

On the other hand, if you want to help yourself, the environment AND the butterflies - Support Organic Farming. Organic protocol has ALWAYS been Non-GMO.

Certified Organic feed is Non-GMO - no herbicides, no pesticides, no fungicides, no antibiotics, no hormones. No chemicals on the soil, your food, or... the butterflies.

# barney buzzkill

I don't mean to be raining on anybody's parade... But I was just thinking ...

Stuck in traffic - a quintessential American pastime with plenty of time for thinking. Seems there's little agreement on much of anything these days - certainly not energy, climate, agriculture or alternatives to the status quo. Just like our traffic jams, we're all living amidst societal gridlock.

As I look out over the sea of cars which surround me, I can't help but think that some of this societal gridlock is due to a lack of perspective. In other words, if we could actually visualize the global implications of our next local traffic jam, would it influence our opinions regarding energy, climate, agriculture and alternatives? Better yet, are we capable of getting our heads around the implications of Local vs Global using nothing more complicated than 5th Grade math? I was just thinking ... maybe we should give it a try!

We've all been bogged down at congested intersections - you know the ones where there's four lanes in each direction and it takes two or three cycles of the lights until you finally make it through? If you were to look closely at your "local" experience, you'd likely be able to count about 50 vehicles. But as you're still waiting, you have time to envision how many other people on the planet are stuck in the very same predicament at the very moment as you. This comes to light by reasoning that this congestion occurs in cities with populations greater than 100,00. Reaching for your smart phone, Siri tells you that globally, there are 4000 cities of this size. You reason that there are at least 100 congested intersections in each of these cities, each of which will contain the same 50 vehicles that you experience locally. Armed with this logic: 4000 cities x 100 congested intersections = 400,000 intersections x 50 vehicles = 20 Million Vehicles! At the same moment as you - 20 million tail pipes - 20 million gas tanks...slowly moving those 20 million gas gauges towards E. But hey, why stop there? After all, that's just the intersections! Let's throw our net WAY out there…and Fill 'er Up.



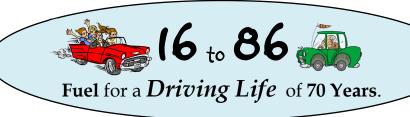
Stuck in Traffic

# Fill 'er Up

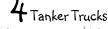


Basic Question answered with 5th Grade Math:

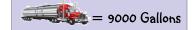
What is the automotive fuel consumption for ONE person over the course of a LIFETIME?



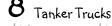
Driving a Sedan:







Driving a Pickup or SUV: 8 Tanker Trucks



















My family's 2 vehicles require 12 Tankers???

Can't be right..



#### Assumptions

Combined MPG Sedan: 30 Combined MPG Pickup/Suv: 15 Yearly Miles for each: 15,000 Driving Life: 70 Years

Tanker Capacity: 9000 gal



Sedan:

15,000 miles/30 mpg = 500 gal per yr x 70 yrs = 35,000 gal.35,000 gal/9000 gal per Tanker = 3.9 Tankers

#### Pickup/SUV:

15,000 miles/15 mpg = 1000 gal per yr x 70 yrs = 70,000 gal.70,000 gal/9000 gal per Tanker = 7.8 Tankers

We've built our lifestyle upon a Moral Hazard - willing to accept risks - because someone else will bear the cost of these risks. Under the buzz of oil, we've thought more of the effects on our wallets, than the effects on our health, environment and future. It is in this light that we find hope, for when we accept the reality of the true cost of an oil-based lifestyle, alternatives gain traction. The remaining obstacle is no longer technology. It is the powerful obstruction and denigration imposed by vested oil interests.

# Farming in the Key of Life





We are an innovative species.
We are also an invasive species.
Our natural world doesn't always resonate
to the tune of our expectations.
We discover that sometimes,
pulling the string just a little bit tighter
saves us time and money.

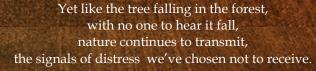




In effect... we change the pitch.

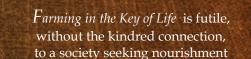
With our senses tuned for the resonance of economy, we are ignorant or indifferent to the discordant anomalies, caught in the turbulence of our wake.





The evidence is all around us, revealed only by those - who are willing to look.





which resonates within this same key.

Thank you for *Eating in Harmony* with the local farming symphony that we conduct, in this most essential *Key of Life*.













Backdrop Image: Glyphosate Burndown - Termination of Life as preparation for Seed

Published by Solar Harvest Farm Waterford WI www.solarharvestfarm.com March 2018



# Solar Harvest Farm

**2018** Harvest Schedule for Pastured Meats & Eggs Keep on your refrigerator for future reference! www.solarharvestfarm.com



Please Compare Apples to Apples! Our Chickens & Hogs consume *Forage* & *Certified Organic* Feed! Unless a Non-GMO (or Natural) label explicitly states Certified Organic, the Non-GMO/Natural feed is produced with Chemicals. We do not use chemicals!

Pastured Chicken Certified Organic Feed Price: Qty:  $3-9 \frac{4.49}{lb}$  Qty:  $10-19 \frac{4.29}{lb}$  Qty:  $20 + \frac{3.99}{lb}$ 

Whole chickens typically 4 - 5 lbs dressed available fresh (NOT frozen) on the dates noted below in green. Here's how to obtain:

Freedom Rangers!

Choose a date in which you will be available to pickup your order.
 Email us to reserve your order. (Or call if you don't have email.) Also tell us if you want livers, hearts or gizzards. (Note: Priced at the same rate as the chicken.)

Mark it on your calendar!

Arrive on the designated date and time with ample cooler space and ice. To assure availability it is best to reserve your needs well in advance.

However, because openings sometimes occur at the last minute, feel free to inquire at any time!

Volume pricing requirements: Picked-up on time; Single payment per order.

**Certified Organic Feed Pastured Eggs** Price: \$6.00/dz (Equates to approx \$3.30/lb) 2dz min order. Pickup Mon. thru Sat.

**Pig-Happy Pork Certified Organic Feed** Price: Half Hog \$3.99/lb Downpayment: \$100/half

Whole Hog \$3.69/lb\*

**Grassfed Beef Rotationally-Grazed** Price: Quarter Beef \$5.49/lb Downpayment: \$100/Qtr

Half \$5.29/lb\* Whole Beef \$4.99/lb\* Grass-fed & Grass-finished! No Corn or Beans!

\*Volume discounts available provided that the order, deposit and final payment are under one name. (Please handle splits between individuals internally amongst your participants.) Pork/Beef pricing is based on hanging wt. Processing costs are extra with estimates listed on the next page.

Our livestock do not receive hormones, medicated feed or rendered by-products. The feed provided to the chickens and hogs is CERTIFIED ORGANIC by M.O.S.A. In addition, the chickens and pigs consume respectable amounts of our organic forage.

Our Grassfed beeves are raised on their mother's milk and pasture for the first 7-8 months before weaning onto a winter diet of hay and organic mineral. In spring the beeves are then finished exclusively on our rotationally-grazed pastures. The hay we make is organic however we must also purchase hay, some of which is not organic. Unlike row crops, purchased hay is never sprayed with herbicides or pesticides. As we work towards the goal of obtaining more land for making hay, we expect to diminish purchased hay accordingly.

Our soil fertility is enhanced via direct animal impact as well as our own compost. Mineral consists of Icelantic Kelp, Redmond salt, rock mineral and microbials. We do not use the standards of diesel fuel nor toxic insecticides for fly control.

Organic electrical energy is produced on site via Solar and Wind power.

Calendar Details: GREEN dates are picked up directly at the farm during the listed timeframe. The Sept 15 and Sept 29 dates utilize Detjens of Watertown as the butcher. Most people request that we bring these orders back to the farm. However, if Watertown is better for you, simply tell us and we will arrange for you to pickup directly. If you do decide for direct pickup in Watertown you will have a wider window of pickup date options. The dates in BLUE are for orders to be picked up directly at the butcher. Tell us which butcher you prefer when you submit your order. The BLUE dates shown represent the ESTIMATED BEGINNING of pickup options. Your actual availability date will be communicated to you by the butcher at which time you typically have two weeks to retrieve your order.

June	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			Pastured Chicken		Pastured Chicken		Pastured Chicken
	17	18	At Farm 4-6 pm 19	20	At Farm 4-6 pm 21	22	At Farm 1-3 pm 23
		Lake Geneva	Pastured Chicken		Pastured Chicken		
	24	<b>Beef Pickup Begins</b> 25	At Farm 4-6 pm 26	27	At Farm 4-6 pm 28	29	30
July	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		Hansen's		Holiday			
	1	Beef Pickup Begins 2	3	4	5	6	7
September	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
							Beef & Pork 10-Noon
	9	10	11	12	13	14	At Farm 15
							Beef & Pork 10-Noon
	23	24	25	26	27	28	At Farm 29
October	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		Hansen's					
	14	Beef /Pork Pickup Begins 15	16	17	18	19	20
		Lake Geneva					
	21	Pork Pickup Begins 22	23	24	25	26	27

<b>Typical Costs for Ha</b>	2018			
Item	Hanging Wt x \$/lb	Meat \$ to Farm	Processing \$ to Butche	er Total Cost Estimate
Pork - Half Hog	90 lbs x \$3.99	\$359 \$89 \$664 \$179		\$448
Pork - Whole Hog	180 lbs x \$3.69			\$843
Typical Yield From Half	f Hog (Double for Whole Hog.)	Because of natural variations,	you will be asked if	
Cut	Lbs	you prefer large, medium or si		
Ham	16	commensurate to your decision.		
Shoulder Roast	10.7	Pork halves range from 70-120	TO A STATE OF THE	
Ground Pork	10.2	Range potential of Total Pork		
Chops	9.4	Beef quarters range from 90-1	4.1	
Bacon	6.5	Range potential of Total Beef (	A PART OF THE PART	
Loin Roast	5	2018 July Beef will once again		
Pork Hocks w/meat	4.2	25% heavier than the estimate		
Snare & Baby Back Ribs	3	fer more beef, request the July		

Take Home Weight - Half Hog

Take Home Weight - Qtr Beef>

90

Spare & Baby Back Ribs Neck Bones w/meat

Liver (for liversausage)

Round Roast

2.5

2

1.3

<b>Typical Costs for Qua</b>	2018					
Item	Hanging Wt x \$/lb	Meat \$ to Farm	Processing \$ to Butcher Detjens - Hansens - Lake Gen	Total Cost Estimate Detjens - Hansens - Lake Gen		
Grassfed Beef - Quarter	120 lbs x \$5.49	\$659	\$75 - \$89 - \$98	\$734 - \$748 - \$757		
Grassfed Beef - Half	240 lbs x \$5.29	\$1270	\$145 - \$169 - \$192	\$1415- \$1439 - \$1462		
Grassfed Beef - Whole <b>NEW!</b>	480 lbs x <b>\$4.99</b>	\$2395 \$290 - \$338 - \$384		\$2685 - \$2733 - \$2779		
Typical Yield From Quarter Beef		* Processing costs vary by butcher. The lower price				
Cut	Lbs	3 3	is Detjens. Detjen orders are typically brought back to our farm for convenient local pickup. However,			
Ground Beef	27.8	you may pickup directly in Wat				
Chuck Roast	16.7		Hansen's & Lake Geneva orders are all picked up			
Sirloin Steak	7.1	directly at the butcher. The Sch	All Control of			
Round Steak	6.1	trates the respective butchershop				
Soup Bones/Misc	5.8		Orders picked up directly at the butcher have the advantage of greater flexibility due to their regular store hours. Orders picked up at the farm must be picked up exclusively between 10am to Noon.			
Club Steak	5.5					
Rump Roast	4.6					
Sirloin Tip Roast	4.6	These are all reasonable ESTIM				
T-Bone Steak	3.8	sent just one of many ways the				
Boneless Stew	2.8	order. If you have a preference,	11/2/10			
Liver	2.5	your specific needs with the but	C. A. F. Hall			
Porterhouse Steak	1.6					

Sticker shock? You are buying a year's worth of meat at one time! Even if you bought the lowest quality meats from the supermarket, the equivalent cuts would cost \$1100 for a half of beef, \$450 for a whole of pork. Know that approximately 12% of the weight of supermarket pork is injected brine solution. You are paying "meat prices" for this brine liquid. We don't do this! We also can't and don't compete with mass-produced supermarket meats in just the same way that mass-produced meats cannot compete with our quality, nutrition and sustainability. However, if you were buying individual packages from the natural or organic meat case, our prices will save you money - and in almost all cases, provide you with a superior product!

Main point: When buying in bulk from our farm, the prices shown above are not THE added expense to your budget. The added expense is revealed by subtracting the cost of supermarket confinement meats from the cost to purchase our local pastured meats. When dividing this difference over 365 days, most people recognize this to be affordable, valuable and indeed essential.

Doesn't matter... You still need to spend less? Ask for a smaller weight! Overall costs are directly proportional to the hanging weight. Please see the potential range illustrated above and request "small".

\*The processing costs includes the fees associated with slaughter, cutting, wrapping, smoking and curing. Your order will be custom cut per the cutting instructions that you provide. If you've never done this, don't worry as the butcher will walk you through this effortlessly. We will also coach you prior to the harvest date. You may instruct the butcher to provide additional services at your own added expense. Examples of these added services include sausage making, patties, additional slicing or smoking, deboning, cryovac etc. Cost vary at different butchers. The range we have illustrated is typical. Your actual costs may be more or less depending upon the requests that you make of the butcher.

Please note that a the nature of making ham, bacon and some sausage involves the addition of curing agents, spices and flavorings that may or may not be to your satisfaction. For those concerned, ask the butcher if they offer a sausage variety without MSG. If you are inclined, please make a point to ask the butcher the ingredients at the time you provide your cutting instructions. If you have questions you'd like answered before you place your order, please contact us or the butcher directly. For a revealing perspective on nitrates, please read http://www.solarharvestfarm.com/Nitrates.pdf.

We have raised these animals to provide the purest qualities available anywhere. To avoid the integration of undesirable ingredients, many people take their pork trimmings as pure ground pork and make their own sausage patties. It is easy, delicious and best of all, contains no additives other than spices. Penzeys offers many sausage seasonings. Refer to www.penzeys.com for examples. If you prefer not to have your hams cured, you will receive "fresh hams" in their pure form. These are pork roasts "to die for"in the crockpot, tender and juicy! Or simmer some with your favorite BBQ sauce, serve with rice or on a bun and the kids will love you - (even more)! Bacon is the exception. If you don't have it cured, it's called side pork which is quite different from smoked and cured bacon. If you take the ground pork and fresh hams in their natural forms, you receive the pure meat from this farm while saving the expenses associated with smoking and sausage making, (typically sausage adds \$1.50 per pound to whatever quantity you elect).

Freezer Space Required: Quarter Beef: 2.5 - 3 cubic feet. Half Pork: 2.5 - 3 cubic feet Visualize this: Picture 3 to 4 full size paper grocery bags for each quarter beef or half of pork.