

Solar Harvest Farm

2016 Spring Newsletter

Fellow Connoisseurs of Food Raised in Sunshine,

March 8, 2016

We're off to an early start this season hoping to catch many people before they head off on their spring vacations. As always with a year between newsletters, there's no shortage of newsworthy material begging for your attention. Perhaps the best attention-grabber is that there are **No Price Increases on Anything!** This stability feels wonderful to producer and consumer alike. Improvements to the new land now bearing fruit, we also have more beef and pork to offer!

This newsletter also addresses the limits - the restrictions - that inhibit future growth of established small scale farms as well as discouraging young adults from entering the Farm-to-Fork market - begging the question: *How do we get there from here?*

Please take some time to read about 2015 highlights as well as a perspective on the big picture we all live amidst.

While the "perfect" grazing season may never reveal itself, 2015 was perhaps as good as it gets - maybe even worthy of *once-in-a-lifetime* status. Yes, the spring was cold and damp. Yes, the grazing season started three weeks late. But once the blaze growth started, it just kept on coming - cool season forage almost all summer long. And what an amazing difference all this lush forage induced on the performance of this farm. Beef weights were unprecedented. The pigs never ate so much salad. The chickens ranged like kids in a candy store. I can't believe I have the opportunity to type these words, but here it is: We had a good season!

The 2015 season may prove to be the leg-up we needed at a very pivotal moment. Meanwhile, while all that forage was growing fantastic beef, chicken and pork, several projects were underway. A new beef/hog sorting/loading facility was installed at both the home farm and the new 40. Additional interior fencing was installed at the new 40. The woven wire fencing and gates integral to the new free range poultry area were improved. The lean-to on the old barn at the 40 was opened up to allow hay storage. A new well was drilled at the 40.

The dollars spent on sorting and loading facilities are proving to be anything but discretionary. For reasons unknown, some of the 2014 crop of calves were uncharacteristically wild. A few were outright dangerous. Yet these calves were derived from the same cows and bull from previous seasons. It was just a matter of time before someone got hurt - and that finally did happen. With the improvements now in place, the potential for injury has been greatly reduced. Still, you can't win them all, as we found out while loading the late September beef at the 40...

The new set-up was in place. The herd had been moved into the wide grass laneway, designed to be utilized for this overnight staging. This laneway is 33' x 660' with woven wire around the full perimeter. The sorting/loading facility is on the far west end. At dusk on the eve of loading, the herd was moved into the sorting paddock, which is all heavy steel. We pulled in with the truck and trailer at twilight the next morning. As I exited the truck after aligning the trailer to the load chute, in the shadows I thought I saw the silhouette of a animal above the height of the fencing. As I focused my eyes in the dim light, to my dismay - and before anything could be done to stop it - the wild one in the group had climbed on the backs of others in order to clear the fence. Now we had a dreaded scenario. The wild one was separated (but still within the perimeter fence). The rest of the herd was now agitated - wanting to reunite with the wild loner. Attempting to merge them back together could prove disastrous. We also had a tight time commitment with the butcher in Reeseville. The decision was made to take what we still had contained. We nudged the group into the sorting box at which time, as designed, they all made a bee-line down the chute and into the trailer. It continues to amaze me that cattle will willingly walk into a dead-end trailer.

Seems like a relatively happy ending, right? Unfortunately, the lead time at butcher shops is six months. We also had several customers expecting their order at this time. To boot, it was too dark to verify the whereabouts of the jumper. This animal now required a 200' zone of personal space. Encroaching on this, especially in it's agitated state,



could cause it to jump the perimeter. The liabilities of a loose canon running amidst society are unpalatable. I had a three hour round trip truck ride to contemplate the options.

I decided to first try begging for an emergency single animal opening at Hansen's. Yet the person needed to authorize an overbooking could not be bothered. The clock was ticking. The Reeseville butcher could not accept the animal after twelve o'clock. There was no other option. I would have to attempt to load the animal by myself, then drive all the way back to Reeseville with just this one animal.

I left a message on Michelle's work phone, grabbed the rifle, then headed back over to the 40 with the trailer. If the animal did jump the perimeter, I would attempt to drop it and field dress it - an unpalatable and risky scenario that was still far better than an animal at large. I first tip-toed to the crest of the laneway hill to get a visual on the animal. Yes, it was hiding amidst the trees. I then fortified the load area corners with anything I had - plywood, branches, fence posts - anything to discourage jumping. Michelle then showed up, worried that I would get charged and kicked again. She stayed out of sight, armed with a tall branch, ready to discourage jumping, should that happen. I then took a wide 600 foot arc down the field to get behind the animal without inducing a lateral jump. As soon as I climbed into the laneway behind the animal, it ran to the crest of the hill, then squared off with me. This usually is not a good sign. Often this signals that they will try to run at and past you. I had a 10' length of pvc pipe in each hand to discourage this very action. So I just stood there, deciding that the animal would have to make the next move. This worked as the animal turned and headed to the load area. I sprinted to close the gate behind it. To my delight, the animal entered the load paddock, circled and made a bee line down the load chute and into the trailer. In hot pursuit, I slammed the trailer door a split second before it doubled back.

One of the best things about this job is that you never, ever know what will happen on any given day.

Freedom Ranger Update

Now with two seasons since we switched from Cornish Cross to the Freedom Rangers, the weights obtained at harvest time have improved. Of course we should all know that the weight gain enjoyed by the Cornish will never be replicable with any other breed of chicken. At the same time, no other breed carries the liabilities found with the Cornish. Because this transition is still new to all of us, I have once again included this information within the pages of this newsletter. Please revisit this page for a refresher on why we have made this change. (If perhaps my write-up is less than compelling, consider watching the short PBS video *Dirty Birds - A Story of Chickens in America*. <http://www.pbs.org/video/2365438215/>.)

While the accommodating weather bears some of the recognition for improved performance, we also implemented improvements to brooding, transfer to pasture, feeding and satellite shade areas. Predation was also greatly reduced this season.

Overall, based on both our own analysis as well as feedback from many customers, the quality of the end product has been excellent!

Pig-Happy Pork Demand has motivated us to grow this segment of the farm by ten percent each year. Our organic forage continues to be integral to our feeding menu, along with their certified organic feed ration. Of all the options available at specialty stores, I've yet to see any store offering pork derived from certified organic feed and farm-grown forage. The specialty pork I have seen in the Milwaukee area natural food stores has all been "Natural" pork. While these Natural offerings may (or may not) provide the consumer with an advantage over CAFO pork, clearly the benefits associated with certified organic feed as well as forage are not induced within the final product nor the stewardship of the land used to produce the pork. The fact that our hogs are receiving certified organic feed and our lush organic forage amidst an outdoor environment which clearly makes them "Pig-Happy", reveals that we have something unique and truly special. The fact that demand continues to outpace our growth tells us - and YOU - that others agree!



Pastured Laying Hens Recall that we were on the rebound from our 2014-15 debacle resulting in unprecedented near zero egg production from November to February. The good news: Both the old gals and the new girls did indeed bounce back, providing excellent production all the way up to Thanksgiving of 2015. Our gamble - the thousands of dollars we pumped into the flock while they were not proving any eggs - did payoff in the long run. However, true to the financial forecasting, had we stayed at \$5, we would no longer be in the pastured egg business.

With the exception of the short period known as the Spring Abundance, demand has continued to outrun supply. Where we have lost some loyal customers to the spring 2015 increase, we picked up many new supporters. For those who "feel like a sucker" for buying our pastured eggs at \$6 when "Organic" eggs are available in the stores for \$5, rather than once again reading my pleas on deceptive marketing, please make a point of visiting the most excellent Cornucopia Institutes Scrambled Eggs Report. The PDF can be viewed at <http://www.cornucopia.org/egg-report/scrambledeggs.pdf>.

I have not submitted our farm's attributes to the Scrambled Eggs report primarily because we sell all of our eggs directly off the farm to customers who witness the hens in the field with every pickup. I have completed the survey resulting in an Exemplary - Beyond Organic 5-Egg rating.

There are a few Small Farm attributes that are not integral to the above evaluation that may carry some weight with you, as they do for us. Farm diversity and the inter-relationships between laying hens and other species is integral to our farm. Additionally, because our pastured meat bird enterprise utilizes dual-purpose breeds, you and I are removed from the ethics associated with hatchery sexing. In other words, we raise "straight run", as opposed to raising hybridized pullet chicks and/or meat birds comprised exclusively from cockerels. In both cases, the less desired sex is euthanized at the hatchery. Here, any pullet which does not make the cut as a meat bird is rewarded with a lifetime career in our truly pastured laying flock, where they remain until they only die of natural causes.



Pastured Eggs - Long Term View? Warm winter weather has created new problems. Our indoor capacities are limited to nighttime roosting and daytime nestbox activity. All food and water exists outdoors, where the birds spend all daylight hours. The rapid cycling of weather extremes is inducing the metabolic stressors which ultimately lead to greatly diminished egg production. We need firm, frozen, (read - clean) outdoor ground for this system to work. We now have to create an alternative winter environment that will minimize the effects of these winter extremes.

Financial Update As regular readers know, the past five years have been transformational. We purchased additional farmland and invested in infrastructure necessary to utilize this new ground. We've modified our methods to adapt to increasing work loads. All of this was achieved with the goal of maintaining or improving conditions for the livestock, the soil, the people performing the labor and certainly, the quality of the final product.



Thanks to the good season we experienced in 2015, we were able to pay down some of this debt. Yet we have a long row-to-hoe in paying down the quarter million dollar land expense. By sheer coincidence, the year in which we celebrated the payoff of our home farm mortgage (2012) was the same year we acquired the commercial mortgage for the new farmland. That wonderful feeling lasted for only a few months.

Financial institutions are not nearly as friendly nor flexible with agricultural lending. In spite of the fact that an expensive appraisal demonstrated acceptable farmland value, the bank did an about-face on a sensitive subject. The underwriters, still jittery from 2008, would not accept the farmland as the exclusive collateral - they also demanded a lien on the home farm. (Anyone thinking - *find another bank* - is perhaps unaware of the lack of options for those seeking a commercial mortgage.) The current commercial mortgage is a 10 year lock with payment amortized over 20 years. In reality this is a 10 year note with the potential for a substantial balloon payment in 2022.

There's no one that can predict 2022 interest rates. Rolling the dice: If we're lucky, 2022 rates are reasonable allowing affordable restructuring. Conversely, high interest rates would create a payment in excess of our capabilities. If this high interest rate occurs during a period in which farmland prices diminish, (and much talk has been expended on the possibility of a land bubble), the potential exists that we would be forced to liquidate everything - the new land, the home farm and our home. Probably not likely, yet a risk nonetheless.

If the weather cooperates, we'll have further opportunity to paydown and minimize this concern. Conversely, if the weather pendulum swings hard the other way (El Nino, La Nina), we'll go backwards.

The weight of the farmland mortgage is not the exclusive liability. This concern exists in tandem with the expenses required to initiate each new season. These expenses begin immediately after receiving our last income from the October harvests. It is during the period from October through July, (in which we have no further income), that we typically require \$120,000 in expenses just to start the forthcoming season. As has been the case since the dawn of agriculture, this expense is completely vulnerable to the forces of Mother Nature. An extended period of bad weather or a single catastrophic event occurring prior to our early harvests creates the potential for the irrecoverable loss of this \$120K. We are not structured like a CSA - where the farm patrons share and accept the same risks as the producer. This, in combination with the lien, would be the show-stopper.

Keeping things in perspective, 2015 marks the year in which we reached the summit of this twenty year climb. Our recent investments are now providing the expected return. The 2022 worry aside, we could actually do very well in 2016 "if" the weather cooperates.

Over the years I have many times in this newsletter asked the question "Who can Farm?" With the click of a mouse, my financial software gives substance to this abstract. Since the purchase of this farm in 1993 we have invested \$1 million in building the foundation with land and capital. Upon this foundation we have expended another \$1 million raising livestock. Hiding amidst this outlay is the recognition that 50,000 labor hours were necessary to reach this point. If this business had been built by contractors - as so many other businesses are - a modest \$50/hr assessment would add \$2.5 million to the expense ledger. We saved this \$2.5 million by expending our own muscle. Enterprising young adults have the muscle. Many have the know-how. Considering the reality that wages have not kept pace with inflation - especially for young adults - it should come as little surprise that aside from inheritance, few young people enter farming.

In The NEWS



Crop Insurance Subsidies

In the Fall of 2015, a bipartisan congressional group recognized the excesses built into Crop Insurance subsidies. They're proposal, which initially looked like a slam-dunk, was reversed at the last moment due to heavy lobbying pressure by industrial ag groups. This bipartisan group of congress had recognized that the rate of return guaranteed to the 17 select insurance companies was being subsidized at 14.5% - almost five times the return of other insurance products. The proposed legislation reduced this guaranteed margin over time from 14.5% to 8.9% - still almost three times the industry norm. Instead of recognizing that this legislation had zero impact on the actual farmers (62% of the farmer's premium still being paid by the taxpayer), the industrial ag groups propogandized the legislation, invoking fear within their ranks that the legislation would undermine the entire program. The response from these misinformed constituents ultimately induced the reversal of the legislation, leaving the guaranteed rate of return at 14.5%.

The USDA mandated insurance policy guarantees a 90% payout on the farmer's claim. There are no caps to individuals nor caps on the overall cost to taxpayers. This program is an open checkbook. Unlike the prior farm subsidy program which required full transparency, Congress has barred the USDA from revealing the identities of payout recipients. Of the 17 insurance companies authorized to participate, 12 have parent companies with net worth ranging from 4.4 to 281 billion dollars. Seven of the 17 are not based in the US. Note also that the American Farm Bureau, the largest farm lobbying group in the country and the most vocal against the amendment to reduce insurance company margins, also sells Farm Bureau Crop Insurance, as one of the select 17.

"Who Cares"? Normally, assessments performed by insurance underwriters provide answers to key concerns: Accept or decline the risk; If risk is accepted, premiums must be commensurate to risk. Someone at the top of a corporate hierarchy cares about the performance of this risk/reward assessment. Yet the structure of the Crop Insurance Program reveals itself as a cornucopia of unbridled funds. Hence, insurance management enjoys a risk-free, care-free, taxpayer funded free ride - at 14.5%. Underwrite - assess risks? Why bother? Regardless of the payout on a farmer's claim, Uncle Sam is guaranteeing the insurance company a 14.5% profit with no caps. The limitless design of this program has prompted some of these deputized insurance companies to run full page ads in farm papers, soliciting farmers to attend wine-and-dine symposiums at dozens of locations throughout the state.



How this Plays Out - Hypothetically A farmer has access to 500 marginal acres of typically wet grasslands. With insurance in hand, premiums subsidized by taxpayers at 62%, the farmer can't lose. He decides to proceed, planting the marginal grasslands to corn at his expense of \$600/acre - normally a \$300,000 risk on marginal land. If the land proves to be too wet and the corn crop fails, because current corn prices have fallen below the cost of production, the farmer will actually make more money collecting the insurance on the actual cost of the failed planting. This has created the scenario in which some farmers are "farming the program" with greater intent upon making the insurance claim than harvesting the crop. Currently, more than 80% of planted acres are enrolled in subsidized crop insurance.

Perhaps the actions of the Farm Bureau provide the most revealing evidence of hypocrisy and the obstruction of alternatives. It is inaccurate to characterize this powerful lobbying group as acting in the interest of farmers. The FB acts exclusively in the interests of Industrial farmers, not with indifference to Organic, Pastured or Grassfed, but with open and malicious contempt. The FB is quick to lecture on the ramifications of government interference while at the same time, willing to put it's full weight behind any subsidy which will benefit it's Industrial members and any regulation that will inhibit alternatives. Within the ranks of the FB, organic is a four-letter-word to be invalidated at every opportunity. Yet it is the Industrial proponents who are receiving the vast majority of farm subsidies. While Industrial Ag has succeeded in preventing transparency within the new Crop Insurance program, to their great dismay, the Direct Payments integral to the previous Farm Bill remains viewable on www.ewg.org.

Amidst the bigger picture, one can't help but wonder how many recipients of this open-ended government insurance assistance are simultaneously accepting insurance subsidies in one hand while the other hand actively conspires to overturn insurance assistance for others. It must be stated emphatically: Young adults can not/should not venture into full-time alternative farming due to the exorbitant cost of pre-ACA privately obtained health insurance. High deductible, high co-pay induces potentially overwhelming risks to lifetime health and finances. If others cannot see the relevance to this publication, it is because they do not want to see the relevance. Please visit the ewg.org site to shed light on this perspective. Farm subsidies are income. Regardless if the income was intended as a safety net or cost avoidance, the farm captures additional resources. Am I suggesting that the savings and/or direct payments from Farm Subsidies influences margins such that the recipient can now afford health insurance premiums for the family? Absolutely.

Consumer Organic Demand Outpacing Supply

Within the perceived vision of Free Enterprise, we'd expect demand to stimulate supply. Yet few existing farms have been willing to convert to organic. While the supply of potential entry level organic farmers appears high, this budding enthusiasm is quickly extinguished by the reality of insurmountable expense and risk. Consequently, large scale suppliers have been forced to scour the globe to meet demand. Some organic brands have opted to spend millions purchasing their own corporately owned farmland to be farmed by employees.

COOL Repealed

Congress voted to repeal Country Of Origin Labeling. Meat processors and supermarkets now have the flexibility to sell meats derived from any country without the need to reveal the origin to the consumer. Despite the prevalence of consumer surveys demonstrating that the vast majority demand transparent labeling, the repeal of COOL was advanced for the benefit of businesses wishing to export meats without the retaliatory sanctions threatened by WTO trading partners. Buying local remains the last alternative for consumers who demand to know the origins of their meat purchases.



More In The



Raising Beef on Federal Lands - Fee or Free?

Over the course of decades, the Nevada based Bundy ranch accumulated over \$2 million in delinquent grazing fees. The Bundy ranch had previously used the BLM land intermittently, paying the modest BLM grazing rate like thousands of other western ranchers. In 1993, Bundy proclaimed that he no longer recognized federal authority of Nevada land, stipulating his status as a sovereign citizen with vested rights to the land. Since 1993, the Bundy ranch has freely utilized hundreds of thousands of BLM acres to graze his cattle. The 2016 Burns Oregon stand-off was led by Bundy's sons, with the stated goal of freeing the western lands for use by ranchers, loggers and miners.

The relevance to this newsletter? Like the Bundy's, our family farm recognizes the relationship between cattle and land resources. In 1993, with privately earned capital, we purchased our foundational acreage. Each year, we've paid the mortgage, the real estate taxes and all costs associated with managing and improving this acreage. In 2012, recognizing the need for additional grazing acreage, we invested additional private capital to expand our grazing potential. Amortized over 30 years, our costs exceed \$1100/month (\$28/acre/month) to secure equity, pay real estate taxes and manage the resource.

While the face of the Bundy confrontation(s) portrays an alleged battle between David and Goliath, State's Rights, and perceived appropriate use of public lands, in the backdrop we recognize yet another egregious example of government subsidized conventional beef. The BLM grazing fee of \$1.35 - \$1.69 per AUM is far below the actual BLM cost to manage the land. More importantly, the market driven AUM rates charged on private lands are \$20/AUM and climbing. The Bundy's, along with every other rancher participating on BLM land, have been receiving grazing rates at a 93% discount. With no other bias other than the pragmatics of economics, the Bundy's could never come close to realizing a ROI if they were to purchase the acreage that their beef operation requires.



Industrial Ag Conference Defines Sustainability

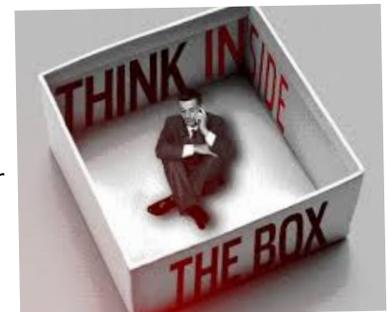
The word sustainable was at the forefront of the latest DBA (Dairy Business Association) conference where a panel of farmers, academics, environmentalists, dieticians and others discussed the issue of sustainability. One panelist stated "Consumers have a lot of misconceptions - they think nutrition and sustainability are the same thing." The owner of a 1300 cow dairy stated "We are a fifth generation farm. Isn't that sustainable? All the food we produce is natural." Jude Capper, a livestock sustainability consultant said "data shows that today's modern farms have a smaller carbon footprint than farms in the 1940's."

Background: Over the past five years, industrial proponents have organized and implemented a full scale offensive against alternatives such as organic, pasture-based, non-gmo etc. The two flanking attacks have focused on "Telling their Story" and "Debunking the Myths". Please go to www.fooddialogues.com and www.findourcommonground.com to discover the character of this spin. A broad brush characterization might read: *Organic isn't necessarily chemical free; Livestock raised outdoors are prone to pathogens; GMO's are indispensable; Antibiotics/Hormones - We need them. We'll be careful. The meat is safe. Stop worrying; Without Pesticides - food production would drop and prices soar; Water Quality - Raising animals indoors allows nutrients to be captured.*

Seasoned readers will recognize this new approach to be a kinder, gentler version of *Saving the Planet with Pesticides & Plastic*.

While Jude Capper is entitled to provide her expert opinion, the numerous works that Dr. Capper has published demonstrate a strong personal bias against organic. As is all too often the case with "science", the attributes which are not evaluated, but should have been if the researcher where not biased, have sufficient influence to reverse outcomes.

Thinking inside the box, it is apparently impossible for Ms. Capper to recognize, quantify and qualify the peripheral effects of Industrial Agriculture - a system which is virtually dependent upon finite and contentious fossil fuel resources. Even if we threw Ms. Capper a huge bone, saying *yes, go ahead and ignore the external costs not captured on Industrial Agriculture's bottom line - the embodied energy - the resource depletion - the environmental consequences of drilling and fracking - the biological implications to soil, ecosystems and human health - the violence induced amidst the struggle for control of coveted resources - even with these astronomical costs imposed on society swept under the rug, this panacea which Ms. Capper is endorsing is literally dependent upon a hole in the ground.*



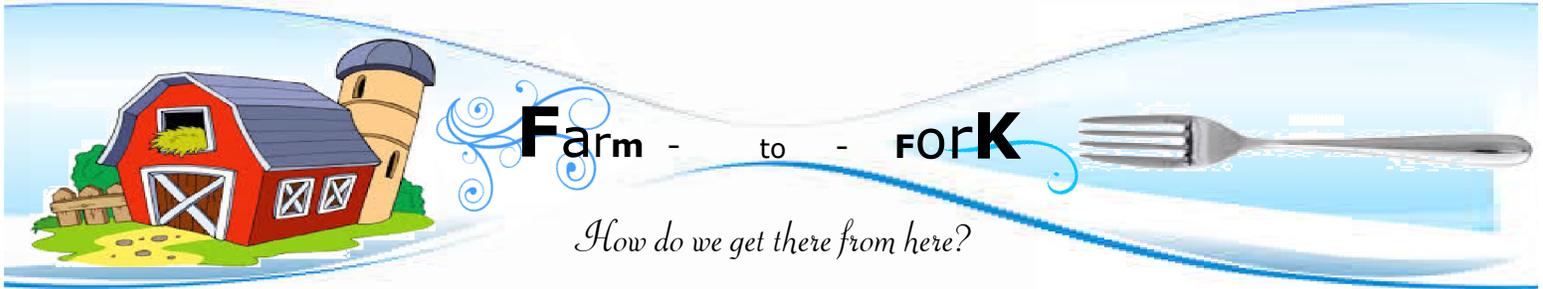
How many more mountain tops are we willing to sacrifice for coal? How many trillions of gallons of permanently toxic water - how many more sand mines are we willing to commit to Fracking? How many private wells are we willing to toxify as collateral damage - homes, farms, lives ruined - because of fracking?

In the broad view, it is not possible to evaluate Industrial Agriculture without recognizing the systemic dependency on Haber-Bosch nitrogen, coal-powered electricity and brute force diesel. Whether the proponents of Industrial Agriculture understand or just don't care about this dependency remains unclear.

What is clear? It's a whole in the ground - this whole has a bottom - there are 7 billion people reaching into this hole.

This isn't Sustainable... This is a





Farm-to-Fork - the 21st century moniker driven exclusively by unbribed consumer demand for locally produced food. In a Free Market system, Economics 101 advises us to simply sit back and watch farm-side incentives induce commensurate consumer-side supply. If only it were that simple. If only this scenario actually existed in a - *Free Market*.

There are two primary obstacles which impede potential for local farm supply to meet local consumer demand: Overburdened local processing capacity; Draconian regulations prohibiting on-farm processing.

Because context is paramount to this concern, the following assessment must preface this discussion.

There are two ways to earn a full-time living farming:

Large: Requires thousands of acres and millions of dollars in capital assets to produce commodity products.

Low margin x high volume coupled to a government safety net = income.

Small: Adapts small holdings to meet niche market consumer demand. Niche is mandated by consumers to integrate value-added and retail services with farm products.

Value-added margins x low niche volume = income.

The farmer's share of retail is currently 16 cents on the dollar. Large or small, history proves that it is impossible to consistently earn a living farming without either access to subsidy, or, access to the 84 cents of every food dollar currently held captive by large processing and retail entities.

How do we get there from "HERE"?

The gist of this introspection - the herein now - lies with the mechanics of the term *Farm-to-Fork*. There's something in the middle there - between the words Farm and Fork. That something is the need for processing - the bottleneck between consumer demand and farm supply. Consumers - fork in hand - are unknowingly attempting to force demand through processing gridlock.

When I work on our farm's processing schedule, I have a yearly calendar before me. First thing I must do is identify the dates for the County Fairs of Waukesha, Jefferson, Racine, Dodge, Rock, Kenosha and Walworth. Each one of these fairs will inundate the closest butcher shops for over three weeks creating a connected overlap from July through September, at which time, some butcher shops begin prioritizing deer hunters.

Most butcher shops prefer that farmers either schedule a small number of animals evenly amidst the above busy season, or, best of all, coordinate their timing such that the animal is ready for processing sometime between December and June. In regards to the former, it is expensive to haul livestock. Variances of fuel consumption aside, it costs the same to haul one steer as it does to haul 10. This involves load facilities set-up, sorting, trailer prep, arranging for help, travel time, unload time, processor paperwork, trailer cleaning and disconnect. Yet this is how most smaller scale farms operate - putting an expensive truck/trailer package on the road for just a few animals, then repeating every week or so. In regards to the latter, as a pasture based farm, summer and fall are our only options if our customers are to obtain the grass-based benefits we have induced within the meats.

The takeaway from this assessment is troubling. Consumers are willfully creating farm-to-fork demand whereas farms wishing to meet this demand find themselves hog-tied. Yet the current six month processing lead time exists at a point in which it is difficult to suggest that there's an actual renaissance in full-time, smaller scale family farming. If anything, my radar screen suggests the contrary. One of the most successful organic farms in this area recently cashed in all their chips. Pastured poultry suppliers appear to be declining. Outdoor hogs continue as an anomaly. If the gauge of success is redefined based on the number of producer listings showing up on the likes of Localharvest or the Atlas, perhaps one might conclude that a farming renaissance is in the bud stage. A closer look reveals many hobby operations subsidized by off-farm income. Maybe they'll bloom into fulltime farmers? Or maybe they'll feel the pressure of this gridlock. Point is, the limited capacity is currently being consumed disproportionately by hobbyists. There is little capacity for growth.

Adding to this concern is the acknowledgment of a decades-long decline in the number of mom and pop custom butcher shops. Like farming, one is left to wonder who will take over once these aging proprietors are too old to do the physical work. Who will have the time and capital to build the added capacity to meet the letter of regulatory law - regulations that make no biological distinctions relevant to volume and duration of use.

Processing capacity and the capital expense correlated to expanding capacity appears to be influenced primarily by the kill floor. This first stage of processing requires a substantial percentage of building cubic footage for animal staging as well as expensive heavy metal and specialty equipment necessary for handling large animals. The siting of a new facility with a kill floor also invites the added NIMBY burdens associated with zoning, trucking, noise, dust, odor, flies and neighbor perceptions.

The Solution

Perform the kill on the farm where the animal was raised. (Often referred to as On Farm Slaughter - OFS.) The criteria influencing the justification for OFS must be based not on a single paradigm (currently industrial) but rather, on the influences pertaining to biological and environmental factors in concert with individualistic consumer preferences.

Advantages of OFS

Consumer Quality Meat tenderness enhanced via decreased adrenaline. Reduced cross contamination potential ESPECIALLY in reference to the scientific data recognizing the greatly reduced levels of e.coli 0157 attributed to grassfed cattle.

Animal Welfare The animal lives and dies on it's home farm. (Please read the accompanying description of the actual killing process on the next page.)

Safety The vast majority of injuries to animals and their handlers occurs while sorting, loading, transporting and unloading stressed animals.

Environmental Blood is converted to nutrients via soil microbes. All non consumable aspects remain on the farm enhancing farm fertility as compost. The dressed weight ratio for beef is roughly 60%. For every 1000 lbs of live weight transported on the highway to the butcher, 400 lbs could have stayed on the farm as fertility.

Economic Stimulus Custom Processor: Some butcher shops could choose to function without the expenses and zoning concerns associated with a kill floor thus incentivizing the potential for new startups as well as increasing capacity of existing cut/wrap facilities.

Economic Stimulus Farming: Increased capacity enhances opportunities for both existing farms and entrepreneurial hopefuls. Liability risks associated with highway transport and commingling at the processor are minimized. Furthermore, by eliminating sorting and loading aggressive livestock, the aging farm family is given the ability to remain productive longer.

Disadvantages of OFS

Criminal Activity It is currently illegal to slaughter livestock on the farm for all instances except direct use by the farm family. A 1000 bird hobbyist level exemption is allowed for poultry. (The DATCP does not actually differentiate hobby farmers from occupational farmers. It is the consequence of the DATCP/Industry ruling which imposes the financial barrier effectively dissuading full time producers.)

Paradigm Shift Processor must invest in a mobile unit. (At perhaps 2-3% the cost of a kill floor facility.)

The farms established to provide meats directly from farm-to-fork are the perfect fit for legalized OFS. Simply stated: If a consumer prefers to purchase their family's meats from the very farm in which the animal lived and died, that consumer should be the over-riding authority. Disclosure aimed at protecting potentially uninformed consumers could be remedied via mandatory, "I accept" participation forms explaining that the meat will not be officially "inspected".

(*See *Inspection - Keeping Things in Perspective* on next page.)



PARADIGM
SHIFT



Should OFS have Limits?

Rather than basing On Farm Slaughter limits on the influences of the industrial paradigm, limits must be based on consumer preference in concert with biological and environmental impacts.

Consumer Preference: Consumer specifically requests OFS. Consumer is the end user. Signed disclosure statement on file.

Biological/Environmental: Bacterial and environmental concerns are commensurate to the interacting influences of quantity and duration in correlation with the substrate that the kill was performed on. **If Substrate is Pasture:** Farms that raise meats rotationally would realize biological/environmental benefits if the animals lives ended exactly where they were grazing at that moment. The simple act of moving each kill to a fresh section of pasture - as little as ten feet - will mitigate pathogenic and environmental concerns far better than any industrial process could hope for. **If Substrate is Barren Soil:** Animals are killed where they stand, then removed to the paddock for processing on a fresh, grassy area of the farm. **If Substrate is Concrete:** Concrete is only as safe for processing as the amount of water necessary to keep the work area clean. The wash water and wastes all have to go somewhere to be processed naturally or mechanically. Ironically, of all the surfaces available on the farm, and in light of the fact that virtually 100% of industrial meats are processed on concrete, concrete on the farm proves to be the most limiting.

It is tempting to establish an arbitrary limit, even if that limit were generous. Yet it is easy to observe the sanitation induced by nature when as little as one week is all that is required for the sun, air and soil to process nutrients. In this respect, duration typically trumps quantity.

OFS - Eyewitness Account

In earlier years, we arranged for several animals to be killed directly on the farm for our own family's consumption. Having personally witnessed this process, I will share the experience.

The mobile butcher drives onto the farm in a pickup truck pulling a custom built enclosed trailer. With the aid of integral electric and hydraulics, the unit is self sufficient. Because we utilize rotational grazing, our pasture paddocks all have pressurized water spigots every 100 feet. This allowed the butcher to drive his self-contained rig directly to the far pasture where the cattle were grazing. Now in position in the same paddock, the butcher removes a 22 rifle from it's sheath and verifies the specific animal. The herd remains as they do any other moment when people are present. Some stand at attention and cautiously watch whereas others simply continue grazing. The butcher patiently walks within his experienced range, waits for the animal to look at him, then squeezes the trigger. The report of the rifle is followed by an almost instant oomph of a single exhalation followed again by the sound of the weight dropping on the pasture. The animal is literally dead before hitting the ground. The butcher immediately cuts the throat to allow the animal to bleed out then moves his rig closer. A jib crane on the back of the trailer lifts the heavy carcass. In short time, in the hands of a skilled craftsman, the head, offal and hide are removed. The carcass is halved, hooked on the rail, rinsed with clean water, then slid inside the trailer. The large white bag of offal is placed inside the bucket of my loader, along with the head and legs, then promptly taken to our compost pile where it is covered amidst compost, fresh wood chips and bedding. The sac remained intact, with not one drop of it's contents ever to touch the carcass.

It is a natural human trait to express concern for the herd mates who witnessed the killing. I too, have always been acutely observant of the effects on the herd. Yet in every instance, I witnessed complete indifference from the other cattle. If another animal happened to be reasonably close, it would walk up and smell the scene, then walk off and continue grazing.

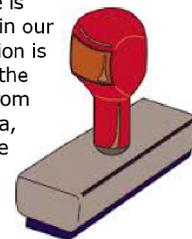
Hogs react differently. Given that they are instinctively nosy and curious, a large number of hogs will nose around the one which is being bled out. (We actually prevent this, but clearly many want to check it out.) If these few moments were isolated on film and shown to others who did not witness the entire process, it would be almost impossible not to interject human-like emotions being displayed. Yet only moments later, once the killed animal has been removed from the group, yet is still visible only 30 or 40 feet away, the herd of hogs immedi-

ately revert back to it's prior state with some lying back down to sleep, others eating and others rooting about. Truth be told, if a dead herd mate were left in with the herd, the others would most certainly consume it. This doesn't make them cannibals. They do not actively scheme to kill another of their species. On the other hand, they are the most curious creature, smelling and tasting absolutely anything they can resulting in one thing leading to another.

*Inspection - Keeping Things in Perspective

Some people are not comfortable with anything other than USDA or State inspected products. Certainly, OFS would not be prudent for these personalities. Of course, no one would be forcing anyone to accept OFS.

Conversely, acceptance of this process could only be realized by people with intent upon finding it. Are there risks? Yes, life is inherently choked full of risk. Everything we place in our mouths is a potential risk. The answer to this question is one of relevance. The weekly headlines reveal that the government sanctioned industrial methods are far from being risk-free. The meat recalls involving listeria, campylobacter, salmonella and e-coli outbreaks - the sickness and even death - are virtually all induced within products which had received the "inspected" stamp of approval.



The system doesn't always work. Should we be surprised? Consider these typical DAILY "inspected" processing plant capacities: Cattle: 5000; Hogs: 15,000; Chickens: 250,000. Biologically, it is completely irrational and illogical for a technologically advance society to expect food to remain uncontaminated at these levels, performed every day, all day, at the same facility.

DATCP Approved Precedence for OFS Deer Donation Program

Since 2000, the WI DNR Deer Donation Program has facilitated the donation of over 87,000 deer which were processed into over 3.89 million pounds of ground venison for free distribution to food pantries and others in need. Every one of these 87,000 deer were field dressed without inspection. Unlike the proposed OFS in which a professional producer, professional butcher and specific consumer are known, the skill and ethics of the hunter performing the evisceration and subsequent handling are completely unknown. Furthermore, unlike the professional farmer and butcher, the hunter does not necessarily make the human connection to the end user as both the donator and end consumer remain faceless. Yet here we are, 87,000 deer later and not one reported problem in spite of the likelihood that some of those carcasses received intestinal contamination during evisceration, were left hanging too long in warm weather or to the extreme - strapped across the hood of a hot pickup truck. We've all seen these examples on the highway or hanging for days in a hunter's garage.

If these conditions are approved by the DATCP (which they do acknowledge and give advice via their pdf *Warm Weather Venison Handling for Optimal Meat Safety*), then certainly OFS should easily be sanctioned for use by professional farmers, licensed butchers and most prominently, consumers who openly seek OFS.

Summary

Regardless of consumer demand, future farm-to-fork producers cannot match any further increase in demand without a commensurate increase from custom processors. Interwoven within this imbalance lies the likelihood that any gradual increases in capacity will be prioritized, not by full time farm operations, but rather, by the increased demand for the butcher's own meat sales as well as the apparent obligatory response prioritizing County Fair hobbyist's at prime seasonal times. It is unrealistic to expect further expansion of custom processors given the prohibitively high costs associated with building new facilities capable of satisfying local zoning while meeting the letter of regulatory law. The solution that best alleviates existing kill floor gridlock is to legalize On Farm Slaughter for consumers specifically requesting this service.

Wisconsin Is Open For Business

It has long been my habit to provide some cohesion and perhaps optimistic closure to the first person narrative segment of these annual

newsletters. Springtime is after all, the personification of optimism. For this brief moment in time - before idealism is overtaken by realism, the effects of spring are intoxicating - the double jeopardy effect of looking into the crystal ball through rose-colored glasses. Life just seems *happier* in this altered state-of-mind.

There are many good reasons to remain optimistic. We're riding on the tail winds of our best season. Consumer interest in alternative farming is exploding. More encouraging yet is the recognition that this isn't a Dotcom Bubble waxing and waning on the whims of discretionary income. This issue is hardcore - for once the details are known - ignorance is no longer bliss.

Detail, details... in the periphery of your predilection exists the powerful status quo, demanding via legislative fiat, that their expertise overrides your demand for details. With telling irony, your appeal for *sunshine* is occurring amidst Industrial Agriculture's aggressive promotion of *darkness*. You don't need to see inside: *Ag- Gag laws*. You don't need to know where your food was produced: *Repeal of COOL*. You don't need to know about GMO's: *California Prop 37; Dark Act*.

I do worry about the perceptions people have after reading these newsletters. I am acutely aware of rabbit holes that many fall into - the echo chambers, paranoia and conspiracy theories - and wonder if readers might feel I've fallen into this hole. In this turbulent world in which life is just so much more palatable when envisioned through rose colored glasses, the perspective revealed in these newsletters might be one of cynicism. Yet there is a relative point where a diagnosis of cynicism falls face first into reality - and here we remain.

Surveys reveal that the vast majority of consumers demand transparency and labeling. They want their chicken out of cages, their pork free of gestation crates and their beef on pasture. At the minimum, this rising tide of consumers desires the ability to differentiate their purchase simply by reading the label - trusting that the words and images on the label are in step with reality. In spite of majority consumer consensus, contradictory legislation continues to be enacted by our own elected representatives.

While there is no single switch we can flip to illuminate correlation to causation, I do believe that we sold our souls at that alter of Citizens United. Money follows power - power follows money. Because of Citizens United, ALEC and extreme Gerrymandering, this ship is now listing, it's keel exposed by the instantaneous rush to one side. Never mind party allegiance and partisan labels. Never mind gloating in the winner's circle. No *body* won. The end game is indifferent to partisan *values* - indifferent to HUMAN values. The influence of corporate power and it's sociopathic *legal responsibility to provide value to shareholders* leaves us with a morally bankrupt legislative process.

Restricted

As for alternative farming and energy, we can expect little other than appeasement bones thrown our way - bones palatable only to hobbyists. Hence, we can sell our eggs relatively free of obstruction - **Restriction** - as long as we don't keep more than 150 hens. Anything more requires a Food Processing Plant License. We can process chickens on the farm - **Restriction** - as long as we limit it to 1000. Anything more requires a Food Processing Plant License. We can process one or two large animals on the farm - **Restriction** - as long as the meat is exclusively for family. Anything beyond this is illegal. And yes, the DATCP has indeed taken their valuable time to investigate us. We can order all the day-old chicks we want from the hatchery - knowing that the DATCP is monitoring small hatcheries. We are obligated to enroll in Premises Registration via the DATCP-deputized WLIC - knowing that the WLIC is an association of corporations inherently adverse to alternatives. In regards to alternative energy, corporate coal interests have induced a moratorium on utility scale wind power. Net metering via solar co-generation has been financially eviscerated by the PSC. Perhaps never before have appointees been so egregiously unqualified as exists within the current PSC.

In this light, how should we assess "success"? This is our break-out year. After 20 years and a million in foundational expenses, we are poised to demonstrate real potential as a local economic stimuli - a viable agricultural occupation originated from grass-roots entrepreneurialism - accomplished with private capital, earned the old fashioned way, without government subsidy

amidst an industrial paradigm which literally subsists on subsidy. Can we really feel successful when we know our foundation is tenuous?



The corollary I would like to impose is what law enforcement refers to as a *known drug house* - a place in which there exists a strong suspicion of illicit activity. Likewise, industry and their associates in government have their eye on farms such as ours. This is not speculation. As the laws do not indict the consumer, you as a supporter of alternatives are not complicit. Yet you are in effect akin to the traffic that frequents a known drug house. Isn't this just mind boggling to imply that the relationship between consumers and the farm that these very consumers willfully seek - is on the state watchlist for illicit activity? Of all the contentious budget cuts implemented in recent times, how is it even remotely possible that this remains a prudent use of tax-payer dollars? Of course this analysis will have the DATCP up in arms screaming foul. *All we have to do is follow the ATCP rules* - which brings us to the nucleus of the conundrum: Paradigm Paralysis.

ATCP regulations induce conformance to normal, expected assets and liabilities associated with non-intermittent processing. Integral to this paradigm are the biological ramifications inherent to livestock raised in high density environments to then be processed at higher speed and volume. The biological potential of pathogen proliferation via higher volume, higher speed, non-intermittent processing increases in proportion to the rate of each attribute. Whereas the DATCP accepts these liabilities as inherent to the industrial process, in doing so, the DATCP sanctions industrial methods of chemical cure (chlorine, TSP) over alternative methods of prevention (ie lower volume, intermittent). Furthermore, whereas fully-enclosed and screened brick and mortar facilities are prudent for higher volume perpetually used facilities, these financial burdens not only require high utilization to realize a ROI, but are actually a detriment to biological sanitation when processing is low volume and intermittent.

The end effects of DATCP regulations: The law forces all producers to conform to the high density, high volume industrial paradigm.

With this second Guided Age now transcending the power of the first, one can't help but wonder what Henry Ford could have accomplished if the likes of Citizens United, ALEC and supercomputer partisan Gerrymandering had existed in his day. With 50 percent market share in 1918, had Ford been armed with the influence of Citizen's United, he may well have delivered a knockout blow to the *lesser* alternatives offered by the Dodge Brothers and Louis Chevrolet. With unprecedented wealth and power in his pocket, then as now, Ford could have *pur-chased* paradigm specific legislation using the now familiar altruistic ruse of the public safety and industry reputation, effectively suppressing alternatives that didn't pay royalties to his industrial paradigm.

Alternatives - Who Needs 'em?

The existence of an alternative - by it's very nature - implies some level of potentially desirable difference, superiority or even intentional low cost inferiority - perceived or otherwise. It's creator has reason to believe that different people might appreciate different products. Without alternatives in the market, Free Enterprise literally does not exist.

It's only speculation to suggest that, had Citizens United occurred a century earlier, a quick glance in the parking lot today might well reveal a blue Ford logo on 95% of our cars. Yet there is nothing subjective about the fact that Industrial Agriculture and Industrial Energy currently control 95 percent of the market. The pattern is now abundantly clear. Each wave of consumer demand for alternatives is rebuked by an exponential response from these entrenched vested interests.

(continued)

If I had to choose just one aspect of this Industrial paradigm paralysis that provides the most glaring example, not necessarily of its implications, but of its existence, I would choose *the lowly egg carton*. As I peruse the DATCP's self-proclaimed *one-stop-shopping of farm egg sales regulations*, I am confronted with these individual carton labeling requirements:



A declaration of product identity. A declaration of responsibility must identify the individual name and address of the packer if they do not have a number assigned. A declaration of net quantity nutrition labeling grade and size of the eggs in letters not less than 3/16 inch high. A "keep refrigerated" or an equivalent statement. The date the eggs were packed. An expiration date or "sell by" date not more than 30 days from the packing date OR a "use by" date. A safe handling statement, such as "To prevent illness from bacteria: Keep eggs refrigerated, cook eggs until yolks are firm, and cook foods containing eggs thoroughly." Packing of eggs in used egg cartons shall only be done using clean cartons on which all markings that do not pertain to the eggs being sold, including brand name, USDA shield, date of pack, expiration date, use-by date, quality, and size are obliterated.

(Never mind the fact that the DATCP is demanding these intricate details on each and every egg carton while at the same time, Industry is railroading Country of Origin and GMO labeling.)

Industrial Agriculture, via its associates in the DATCP has regulated a "large" flock to be 150 hens. Yet the DATCP is intimately aware that a single Industrial egg laying facility houses one million hens.

(Never mind the linguistic qualifiers the DATCP must be using. If 150 is "large", then the DATCP is entitled to describe one million as super-duper or extra-ginormous. Relative to 150 hens being branded as size L, a million bird confinement is not just a 1XL or 2XL but actually 6667XL.)

Under ideal conditions, in one day, one million hens will lay 800,000 eggs requiring 66,667 cartons.
Under ideal conditions, in one day, 150 hens will lay 120 eggs requiring 10 cartons.

Custom carton printing is free with the purchase of semi-load quantities -180,000 cartons. The Industrial producer need only stamp the date. Price/carton: \$0.13

The "large" farm using 10 cartons/day must manually apply the farm name to each carton, blacking out conflicting information. Price/carton: \$0.50 (\$0.35 for carton + printer labels + printer ink + labor.)

(Never mind the fact that the people receiving these cartons are the very people who willfully save and return these cartons to the farm. Of course they know that the wording on the cartons is not intended to represent our farm - they were standing on the farm porch when they picked them up as they looked out in the field and saw the very hens that laid their eggs.)



Wow... So I'm paying 35 cents for each generic carton whereas I could get custom printed cartons, replete with our farm name, logo and all the DATCP bells and whistles - no need for expensive printer labels, printer ink, hand application and blacking out impertinent information - delivered directly to the farm gate in semi load quantities for just 13 cents each. Sign me up. But perhaps I should slow down and justify this first.

Here's how the million hen confinements can justify a truckload: $\frac{180,000 \text{ cartons/semi load}}{66,667 \text{ cartons used/day}} = 1 \text{ semi load every } 2.7 \text{ days}$

How does this stack up against a DATCP "large" farm with 150 hens? $\frac{180,000 \text{ cartons/semi load}}{10 \text{ cartons used/day}} = 1 \text{ semi load every } 18,000 \text{ days (49.3 YEARS)}$

Obtaining a Food Processing Plant License is a reasonable expectation for a business that will fully utilize the necessary capital investment. Conversely, a farm with a flock of 150 hens will have to capture their ROI with GROSS income of just \$60/day. (Using best case \$6/dz Organic)

As context is paramount, let's take off the rose colored glasses and look at this in the real world. Niche offerings are synonymous with "different" - otherwise it wouldn't be a niche. The niche wouldn't exist without apparent consumer demand. The farm with a few hundred hens is responding to customers who desire their eggs from humanely treated pasture-raised hens. These customers articulate that they don't need someone condescending to them with an alternative definition of "humane". They know the level they want and they'll spend their dollar where they're allowed to see it with their own eyes.

Industry disposes of hens at 17 months. They do this by gassing entire buildings or panicking hundreds of thousands of birds into corners where they pile up and die amidst a suffocating foam. This 17 month practice, in concert with other industrial techniques which many consumers dislike, is the reason for the 80% lay rate.

A humanely raised flock - as deemed humane by some consumers - is a multi-generational flock in which the hens live and die a natural life cycle. We trade the assets and liabilities of the all-in-all-out industrial method with the assets and liabilities associated with natural molting. We don't have to raise as many replacements yet molting dilutes the lay rate to 65%. In reference to the DATCP flock of 150 hens - this flock must realize a ROI working with a real world yield of 8 dz eggs per day. If the producer is able to keep \$2/dz for labor, the ROI associated with a Food Processing Plant must be realized on income of just \$16/day. It is noteworthy to reveal that producers selling non-organic eggs at \$3/dz must extract their ROI from the \$8/day margin intended for labor. In this light, the DATCP License fee alone will extract 12 days of margin - 3% of yearly income - that really wasn't "margin" but rather, income above direct costs intended for labor.

What about you - the consumer - how might you benefit if a farm with several hundred hens invested to meet regulations? The gist of the regulations require a separate room with impervious floors, walls and ceiling, separate sinks for washing product, utensils and hands, all with requisite plumbing. We're not cracking eggs for further processing or mixing with other food ingredients. We're simply taking the egg exactly as it was laid, washing in a sterilized sink with hot, clean, tested water and placing into clean consumer cartons. The interior of the egg - the "food" - remains untouched and protected by the shell and inner membrane. It is irrational and illogical to infer that any level of goodness could be induced by these regulations. The only straw the DATCP can grasp is in regard to farmer integrity. Is this THEIR decision or YOURS?

It remains uncertain as to if/when the DATCP will begin prosecuting small farmers for this invigorated law. On the heels of the Baraboo farmer prosecution, the DATCP has been tainted with a reputation as bureaucratic thugs. They may already have a good read on the overall small farm environment: *the existing laws already prohibit on-farm processing; the few existing local processors are saturated; there are only a few custom poultry processors in the entire state; the average age of existing farmers is 58; it is financially difficult for young people to enter farming; it is impossible to earn a living farming small holdings without access to processing and retail; there's really not much room for growth.* Discretion being the better part of valor, perhaps Industry/DATCP recognizes that the existing stranglehold will quietly solve the problem via attrition.

So where's the optimism you might ask?

While the face that threatens us wears a government hat, the impetus remains corporate.

If we want to stop swatting flies, we have to go after the manure pile.

Our lives are now saturated in corporate influence - glitter and warts alike.

While it is clear that our corporations are incapable of empathy - indeed sociopathic - it is equally clear that corporations have a soft underbelly to exploit.

Our corporations have just one standard - they will ALWAYS follow the profits.

Whereas legislation will continue to benefit business as corporations collectively bargain behind closed doors, changes in consumer spending will ultimately influence corporate triage.

It's telling to read the letters of our 19th century immigrant ancestors. The inability to earn a living on small holdings compelled many to cross an ocean into the unknown.

Is there really any point to history if we don't learn anything from it?

Meanwhile, we pinch and ask ourselves: *What country am I living in?*

Shareholder value and cronyism are now systemically intermingled within government, the agencies that protect our environment and regulate our commerce - even telling us what we can and can't eat.

Like extortion expected from a Mafia boss or the bully taking our lunch money - *we'll all get along peacefully - as long as we cooperate.*

We desperately need to have our *Emperor Has No Clothes* moment --- We're no longer functioning as a Democratic-Republic.

This is what Franklin foresaw when he quipped *"A republic - if you can keep it."*

Oligarchy being synonymous with tyranny, the anachronistic semblance to a Banana Republic would have been assiduously sown from Mr. Franklin's tongue.

Bananas are not supposed to grow in this environment. Since our founding, it's always been our job to make sure they don't.

Perhaps *We the People* always feels like somebody else is taking care of this?

Apparently not.

Thank you for your reading time. Hopeful for your support.

Steve Heyer & Family - Solar Harvest Farm



Farmer's Share of Retail

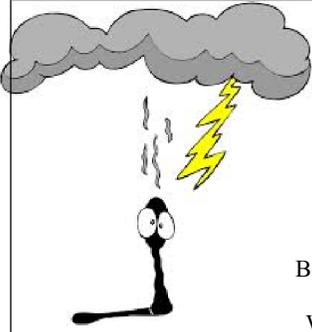


"You can't make this stuff up." -- author unknown

Processing & Sales Share of Retail

Winning the Lottery

(An Inverse Perspective!)



It's been said that we're more likely to be struck by lightning than to win the lottery. Yet unimaginable odds still produce the proverbial one-in-a-million winner. Explicitly or implicitly, the rest of the players - all 999,999 of them - are *losers*.

Or...Maybe Not!

Someone also once said *I don't care too much for money, money can't buy me love*. While this sentiment may be a bit idealistic, the underlying message resonates.

Beyond the shadow of doubt, the security and well-being of family transcends our desire for wealth. Our actions reveal that we will relinquish our wealth if doing so will restore health or security. We demonstrate this, not just during life-threatening extremes, but also by minimizing daily risks. Take the family car as an example. For most, the riskiest venture in each day occurs behind the wheel of a two ton missile, separated from oncoming missiles by the common knowledge and respect - of a painted line.

For all of us, each day represents new opportunities playing out against a backdrop of *stuff happens*. Every day without *stuff happening* is another day in which we've *Won the Daily Lottery*.



In retrospect, it's shocking to recall that prior to 1968, cars were not required to have seat belts. Drivers, passengers - even babies - were unrestrained. Yet in 2016, seat belts are now *Active Restraint Systems* used in concert with *Dual, Front and Side Airbags, ABS, Traction Control, Brake Assist, Adaptive Cruise Control, Blind Spot Warning, Tire Pressure Monitors and Backup Cameras*.

These risk reduction features add considerably to the cost of every new car. Yet consumers not only tolerate this expense, but actively seek the advantages. Imagine, if it were possible, to order a new car without the expense of safety belts and airbags. Imagine a child's life at risk - as a human projectile - unrestrained in a fast moving vehicle. Imagine accepting this risk with the expressed intent of enjoying the avoided cost.



For almost all of us - the Risk is clearly not worthy of the Reward



These same Risk vs Reward decisions are integral to our meat purchases.

Supermarket meats are produced within an industrial mindset. Livestock diets are a contest of speed, achieved with ancillary concern for human nutrition. High speed processing assures pathogen dispersal. Prevention is impractical. With contamination embodied within the process, chemical decontamination is the sanctioned cure, further degrading quality by forcing the consumer to unknowingly consume sterilized manure and dead pathogens.

We'd never again place an unrestrained baby on the backseat of our car. We opt to pay more to reduce automotive risks.

Yet why are many people unwilling to minimize foodborne risks?

#1 Answer: *Perceived Sticker Shock*.

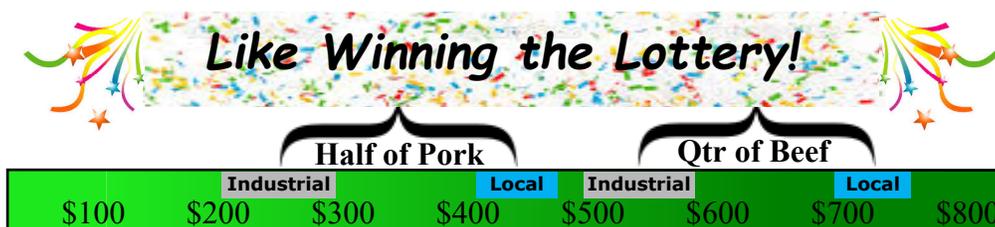
When buying quarters and halves from a local farm, a year's consumption is captured in a single purchase. Yet even with the lower cost and quality of supermarket meats, if you kept a running total of all the packages placed in your weekly shopping cart, the yearly total would also induce this Sticker Shock.

The expense that requires your assessment is not the overall cost of locally produced meats.

It's the DIFFERENCE between yearly Industrial price and yearly Local price.

Yes, we all know small farms don't/can't compete on price and volume. But we also know that quality is inversely proportional to volume. We recognize that an ounce of prevention is worth a pound of cure.

For many people, the peace-of-mind obtained by the differential expenditure of just 60 cents a day for a half of pork or quarter beef is...



“Common Sense ...is what tells us the Earth is flat.” -- Albert Einstein

“I do not feel obliged to believe that the same God who has endowed us with sense, reason, and intellect has intended us to forgo their use.” -- Galileo

All lies and jest, still a man hears what he wants to hear and disregards the rest. -- Paul Simon

There's hardly one amongst us who does not mock the orthodoxy of a Flat Earth or belief that the Sun revolves around the Earth.

Yet all lies and jest, many still pronounce *it's tough to believe in Global Warming when there's a Blizzard outside.*

Henceforth, our history books will contemptuously reveal this belief of convenience as the 21st Century variant of the Flat Earth Society.

Living in the moment, that which is deemed orthodox demands our respect, silences our voices and stifles our pens.

Orthodoxy intermingles and induces what we now refer to as *political correctness.*

Because of orthodoxy, society tip-toed-thru-the-tulips for millennia,
prohibited from exploring the workings of the human body - prohibited from practicing faith in the vernacular.

Perhaps most disturbing to contemporaries is the readily observable fact that orthodoxy,
in the conservative context, is indeed nothing more than a momentary perspective
on the timeline of humanity - validated by correlating one's contemporary conservative opinion
to the corresponding conservative opinion of just three generations past.

The proof lies in the answer to these formerly contentious issues: Should women be allowed to vote?

Should children be allowed to work in factories? Should raw sewage be dumped in rivers?

In each of these cases, the contemporary conservative opinion would smack of liberalism just three generations past.

Diving deeper yet into orthodoxy lies the self-perceptions of religious piety.

Who among us could match the furiously obsessive self-righteous piety of William Bradford?

Who among us would WANT to?



It is now 2016, 46 years steeped in environmental advocacy - 54 years since *Silent Spring*, 110 years beyond *The Jungle*, yet more than ever, awash in oil, coal, fracked nitrogen and chemically-dependant food. Rachel Carson's imperative to learn everything possible about the workings of a single human cell - has largely been achieved. Yet like the science of climate change, convenience trumps consumption. With a yawn and roll of the eyes, society handily moves with the herd - like cattle - in which the irrational behavior of a minority invalidates the rational behavior of the majority.

This planet that we share is a special Goldilocks-approved place. The first color photo of Earth from space - our first *Earth Selfie* - took our breath away in 1967. A few decades later Hubble made us gasp at the unimaginable vastness of space, validating not just our dependency on our home planet but the realization that we are mere celestial passengers. Amidst this vastness, our world is indeed a small world after all.

That beautiful blue marble floating in space is just 7918 miles in diameter. The oxygenated atmosphere that gives us life has its ceiling just 11 miles above our heads - only a few miles higher than the jets we readily see and hear with the naked eye and ear. Why should it be so difficult to comprehend the degradation of such a relatively small area over the course of 300 years? Where is the logic in expecting real-time photosynthesis to be capable of processing the added burden of vast carbon-dense deposits - incomplete photosynthetic leftovers - from several hundred million years ago?

More compelling yet, even if we ignore climate concerns, why would we bet-the-farm, throwing ALL our chips onto fossil technology that is virtually guaranteed to be a dead end? What is it about the word *finite* that we are not grasping? Exasperating this point is population. In 1900 the planet was feeding 1.6 billion people. In 2015 it fed 7.2 billion. In that time period alone, we burned all of the low hanging fruit. The desperation of the fracking process validates this. Of course, at this moment, the price for a gallon of gas is \$1.46. The world is awash in oil - which makes these sentiments appear as lunacy.



Farm photos from the late 1800's reveal the Cutover - the sheer devastation left behind after forests were depleted of virgin timber. Old growth trees 400 years in the making clearcut in under 50 years - 1/8th the rate of sustainability. Greatly transcending this ratio, the 300 million year old oil deposits have largely been depleted in just 100 years - 1/3,000,000th the rate of sustainability.

Then as now, each living generation of humanity was and is looking out for #1. What is currently occurring - the abundance of oil - is the same as if we all cashed out our 401K's, inundating our daily spending potential with perceived windfall surplus - future be damned.

The implications of biodiversity notwithstanding, our Cutover forests have at least been repopulated and managed with a mindset of quantity-based sustainability. Conversely, the *clearcut* of oil & gas can never be replenished, the cavernous voids now permanently toxic with millions of gallons of fracked water, sand and chemicals. This dead end path we are on reveals no recourse.

Our crisis or consensus moment is now in the rear view mirror. Clearly, we cannot come to consensus. Consequently, we will be forced to deal with the inevitable epic crisis of our own making. Of all the issues currently faced by humanity - economic, inequality, poverty, religious conflict, war, terrorism, mental health, disease, societal violence, population, water - all of these concerns pale in comparison to the consequences of climate change and oil depletion. Yet because a financially influential minority contemptuously disagrees with this assessment, we remain adrift, not just devoid of alternative plans, but subject to the visceral suppression of Plan B technologies.

We're living in the moment - likened to drifting carefree on the Niagra river, with complete indifference to what lies ahead. Unless something changes soon, we will follow our patron saints of oil over the edge. As we fall, each of us will cling to a thread - and the fabric of our society will unravel into chaos.

Solutions: Due to the wealth and influence of oil, consensus on anthropogenic climate change appears futile. The consequences of resource depletion stand alone. Alternatives to fossil fuel-based food production and energy must be allowed to develop unhindered by vested interests. Much of the technology and knowledge already exists. The political process is incapable of removing the corporate obstruction. At the primal level, food, water and energy represent the most basic of human needs. In spite of politics and the financially influential message ubiquitously disseminated by vested interests, the market WILL follow if YOU lead.

Promote fair market access for Alternative Farming & Alternative Energy

It's too late... You've clicked on this page... Now you're surrounded...

by a **Cell Membrane!**

(Biology Teachers: Please pardon the square corners.)

Soooo... What in the world does **Farming** have to do with **Biology**?

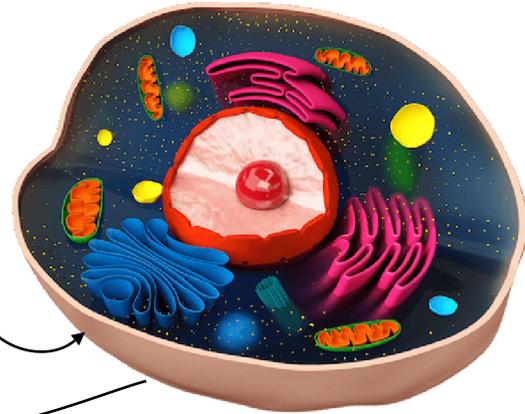
The Connection between Your Health & Our Pastures

Cells take in nutrients from **FOOD**.
Cells convert these nutrients to **ENERGY**.
Cells use this energy to perpetually rebuild - **YOU!**

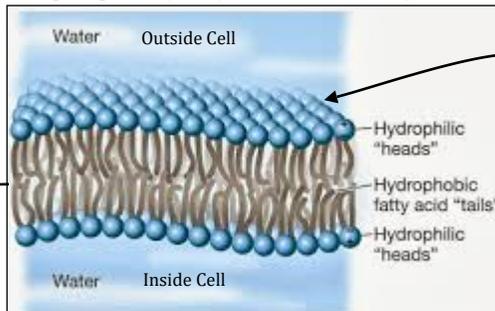
Single Human Cell

A microscopic bag of water, (with a few other *kinda'* important things of course).

We're here today to talk exclusively about the Membrane!



Phospholipid Bilayer (aka - Cell Membrane)



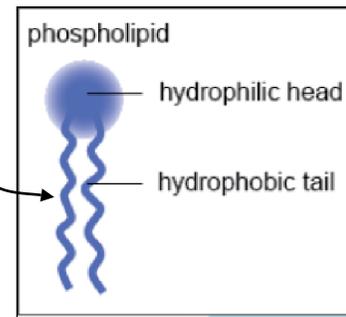
The heads and tails of the membrane bilayer work together deciding what and how nutrients and communication can pass thru as well as when and how wastes must be excreted. The **Hydrophobic tails are comprised of fatty acids**. In order to function properly the membrane requires the ability to change it's composition to adapt to varying temperatures and conditions. The membrane must be flexible (literally) in this regard in order to avoid cellular dysfunction.

The human body can manufacture all the fatty acids it needs except for two - Omega 6 and Omega 3. These two fatty acids **MUST** come from diet - hence they are *essential*. Omega 6's are comprised from the oils found in grains. Omega 3's are comprised of the chloroplast's of green leaves or algae. Humans evolved on a diet in which the ratio of O6 to O3 was 1:1. Since the advent of Industrial Agriculture the ratio is now 17:1. Diets with an excess of O6 yet deficient of O3 have occurred because the diet of conventional livestock is devoid of green pastures. Heavy reliance on grain feeding creates meats which are overly high in omega 6 with almost no measurable omega 3. This is of course coupled with excessive consumption of simple carbohydrates and unhealthy oils.

Because the standard diet has excessive omega 6 yet devoid of omega 3's, by default, these tails are constructed with the omega 6 chain. Omega 6 chains are rigid. Omega 3's are flexible. Because the cell bilayer cannot properly adapt without this flexibility, cellular communication and respiration are subject to errors potentially leading to cellular dysfunction.

Implications: (As if hearing "cellular dysfunction" were not enough?)

The current excess of omega 6 fatty acids is the pathogenesis for cancer, cardiovascular disease, autoimmune diseases - all instigated by inflammation. Science demonstrates that increasing dietary omega 3 intake suppresses this inflammation. As the O6:O3 ratio moves closer to our evolutionary 1:1 ratio, the implications transcend the positive effects of suppressive cure, actively working to prevent disease (aka...cellular dysfunction).



More yet: Both of these essential fatty acids are the exclusive raw materials for making ALL of the prostanoid hormones - substances that carry cellular communications for short distances from cell-to-cell.

Finally - a reason to participate in Pasture-based Farming that has nothing to do with *Saving the World!*

This one's all about **YOU** baby!

(Warning: Taking personal responsibility towards preventing disease will reduce the high costs of Healthcare. Consequently, some may still label you as a Do-Gooder!)



Solar Harvest Farm

262-662-5278

2016 Harvest Schedule for Pastured Meats

Keep on your refrigerator for future reference!



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

Whole chickens typically 4 - 6 lbs dressed available fresh (NOT frozen) on the dates noted below in green. Here's how to obtain:

- 1). Choose a date in which you will be available to pickup your order.
- 2). Email us to reserve your order. (Or call if you don't have email.)
- 3). Mark it on your calendar!

Update 3/23/16:

Limited quantities available on 7/12, 7/23 & 7/26.

Freedom Rangers!

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. (The incentive for us = less transactions and a reduction in people who forget to come!)

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

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

Update 3/23/16:

July Beef Almost Sold Out! Still room for a few quarters.

Half/Whole Beef \$5.29/lb*

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

Compare! We utilize forage & Certified Organic Feed!

Whole Hog \$3.69/lb*

Raising More AGAIN To Meet Demand!

Pork & Beef pricing is based on hanging wt. Processing costs are extra with estimates listed on the Yield page.

*The volume discounts are available provided that the order, downpayment and cutting instructions are under one name as well as the final payment being received at the time of pickup from that same person.

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, mineral and sometimes molasses. Starting in spring, the beeves are finished 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 diesel fuel nor toxic insecticides for fly control. **Organic electrical energy is produced on site via Solar and Wind power.**

July	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Legend		Beef Pickup - Hansen's					
Blue = Pickup at Hansen's		11	12	13	14	15	16
Green = Pickup at Farm			Chicken Pickup 4-6 pm		Chicken Pickup 4-6 pm		Chicken Pickup 1-3 pm
		11	12	13	14	15	16
					Sold Out!		Sold Out!
	17	18	19	20	21	22	23
			Chicken Pickup 4-6 pm		Chicken Pickup 4-6 pm		Chicken Pickup 1-3pm
	24	25	26	27	28	29	30
					Sold Out!		

September	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
							Beef & Pork 10-Noon
	11	12	13	14	15	16	At Solar Harvest 17
				Pork Pickup - Hansen's			
	11	12	13	14	15	16	17
				Pork Pickup - Hansen's			
	25	26	27	28	29	30	Oct 1

October	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
							Beef & Pork 10-Noon
							At Solar Harvest 1
		Beef Pickup - Hansen's					
	2	3	4	5	6	7	8
				Pork Pickup - Hansen's			
	16	17	18	19	20	21	22

Typical Costs for Half and Whole Pork				2016
Item	Hanging Wt x \$/lb	Meat \$ To Farm	Processing \$ to Butcher* Detjens - Hansens	Total Cost Estimate
Pork - Half Hog	90 lbs x \$3.99	\$359	\$77 - \$82	\$436 - \$441
Pork - Whole Hog	180 lbs x \$3.69	\$664	\$151 - \$165	\$815 - \$829

Typical Yield From Half Hog (Double for Whole Hog.)	
Cut	Lbs
Ham	16
Shoulder Roast	10.7
Ground Pork	10.2
Chops	9.4
Bacon	6.5
Loin Roast	5
Pork Hocks w/meat	4.2
Spare & Baby Back Ribs	3
Neck Bones w/meat	2.5
Liver (for liversausage)	2

The weights represented for both the pork and beef are typical.

Because of seasonal and natural variations that exist each year, you will be asked if you prefer larger, medium or smaller.

**Pork halves range from 60-120 lbs.
Beef quarters range from 90-160 lbs**



Take Home Weight - Half Hog >	69
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Typical Costs for Quarter and Half Beef				2016
Item	Hanging Wt x \$/lb	Meat \$ To Farm	Processing \$ to Butcher* Detjens - Hansens	Total Cost Estimate
Grassfed Beef - Quarter	120 lbs x \$5.49	\$659	\$61 - \$84	\$720 - \$743
Grassfed Beef - Half	240 lbs x \$5.29	\$1270	\$116 - \$153	\$1386 - \$1423

Typical Yield From Quarter Beef	
Cut	Lbs
Ground Beef	27.8
Chuck Roast	16.7
Sirloin Steak	7.1
Round Steak	6.1
Soup Bones/Misc	5.8
Club Steak	5.5
Rump Roast	4.6
Sirloin Tip Roast	4.6
T-Bone Steak	3.8
Boneless Stew	2.8
Liver	2.5
Porterhouse Steak	1.6
Round Roast	1.3

Note:

These listings for pork and beef represent just one of many ways the butcher can cut your order. These are only estimates. If you have a preference, (and Mother Nature will provide it on the carcass) feel free to discuss your specific needs with the butcher.

There are two prices listed for processing because the two butchers used have different pricing. The lower price is Detjens. These orders are typically brought back to our farm for convenient customer pickup. However, those who prefer may pickup their order directly at Detjens in Watertown. The higher price represents Hansen's. These orders are all picked up directly at Hansen's in Franksville. The Schedule page tells you when Hansen's is used.



Take Home Weight - Qtr Beef >	90
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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. We 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 is this: 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 meats. When dividing this difference over 365 days, most people recognize this difference to be both affordable and valuable.

*The processing costs includes the fees associated with slaughter, cutting and wrapping, as well as the smoking costs associated with ham and bacon. You will be able to have your order custom cut to your cutting instructions. 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. Double wrap is also available for a relatively small additional cost. (Cost vary slightly at different butchers.)

Please note that as in the past, 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, there are several varieties of sausage available without MSG (Detjens only). 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 call or email us!

We have raised these animals to provide the finest and purest qualities available anywhere. Many people take their pork trimmings as pure ground pork and make their own sausage patties. It is easy and delicious and best of all, contains no additives other than spices. Penzeys offers many different sausage seasonings. Refer to www.penzeys.com for examples. If you prefer not to have your hams cured, you will receive the "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 the smoked and cured bacon. If you take the ground pork and fresh hams in their pure 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.