



C r o w n S R a n c h

Better For the Animal Better For the Environment Better for You





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A New Generation of Farmers

Ten Acres Enough – A Guide to Independent Farming (published in 1864) and *Five Acres and Independence* (published in 1935) – both full of advice, instruction, and occasional admonition – became handbooks for “back to the earth” farmers in the 60s and 70s. What happened to those farmers? Where did they go?

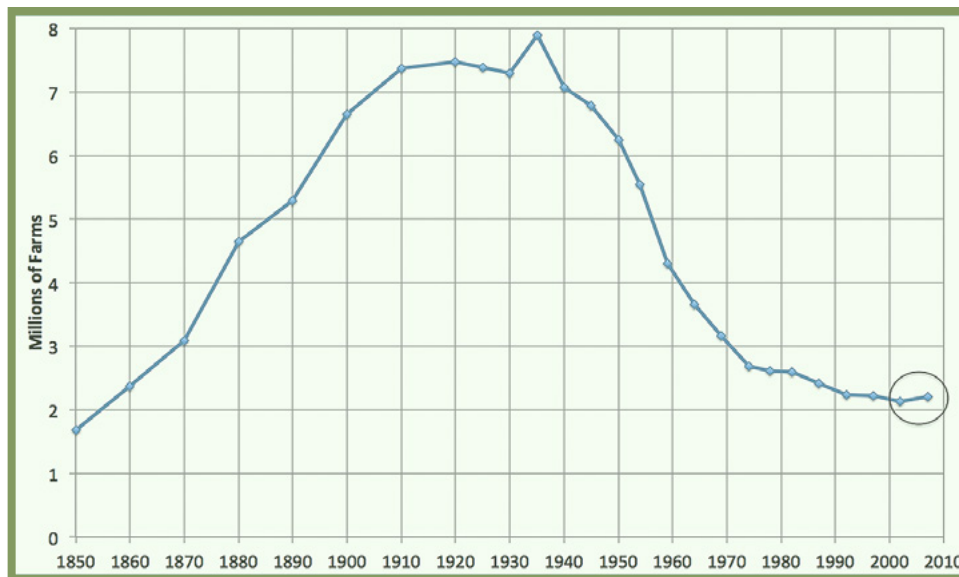
In 1937, there were more than 6.8 million farms in operation; today there are just over 2 million. And while 70-80% of the population was employed in agriculture in 1870, only 2-3% is today. It was in the early 1970s that then Secretary of Agriculture Earl Butz is said to have told farmers, “Get big or get out,” and the number of small farms continued to shrink, often grabbed up by large industrial farms.

As the farm population has gotten smaller, the average age of American farmers has gone up. Today the average farmer is 57 years old and more than a quarter are over 65.

Are we at risk of losing all our farmers? Until recently it seemed so. But maybe not now... A new wave of farmers, most in their 20s and 30s and more than a few in their 40s, are taking up the plow again. While things have changed a lot since the 30s and some since the 70s, it appears there has been a small uptick in the number of farms.

Today’s new farmers are highly educated and many are experienced in fields that may, at first glance, seem unrelated to the business of farming. They come to farming prepared with life experience, advanced or technical degrees, and business skills.

Jennifer Argraves and Louis Sukovaty, co-owners and farmers at Crown S Ranch, are just such farmers. They are energetic, enthusiastic engineers by training – she, civil engineering; he, electrical/mechanical engineering – and combine their training with their passion: farming.



The Change in the Number of US Farms: 1850-2010

As the US expanded westward the number of farms increased until about 1930; jumping dramatically in 1935, at the height of the Great Depression. Since then the number of farms has rapidly decreased, reaching around 2 million at the end of the 20th Century.

Source: United States Department of Agriculture





Engineering an Organic Farm: “It isn’t easy!”

Raising more than 440,000 pounds of hay and grain to produce more than 55,000 pounds of meat and 5000 dozen eggs on 150 acres of farmland is no small job. And to do it with the summertime help of 2 full-time interns and a permanent part-time hired worker means that Louis is literally running from sun up to sun down. Jennifer has 2 helpers “behind the scenes” that help manage the sales and marketing of products in the farm’s store and to area restaurants, retail markets, and individual consumers across Puget Sound.

Located in the Methow Valley in North Central Washington, Crown S Ranch is the farm where Louis grew up. It was the education he received – and life partner he found – at the University of Idaho that make all this production possible.

Both Jennifer and Louis apply their systems thinking to every project on the farm, looking for ways to let the “process” do all the work. And while each grew up on family farms, they are engineers first and farmers second.

Today Louis applies his skills to the management and operation of Crown S Ranch while Jennifer uses her systems thinking for efficient – and effective – sales and marketing

of their products and programs, like their bulk and online meat sales and a meat CSA.

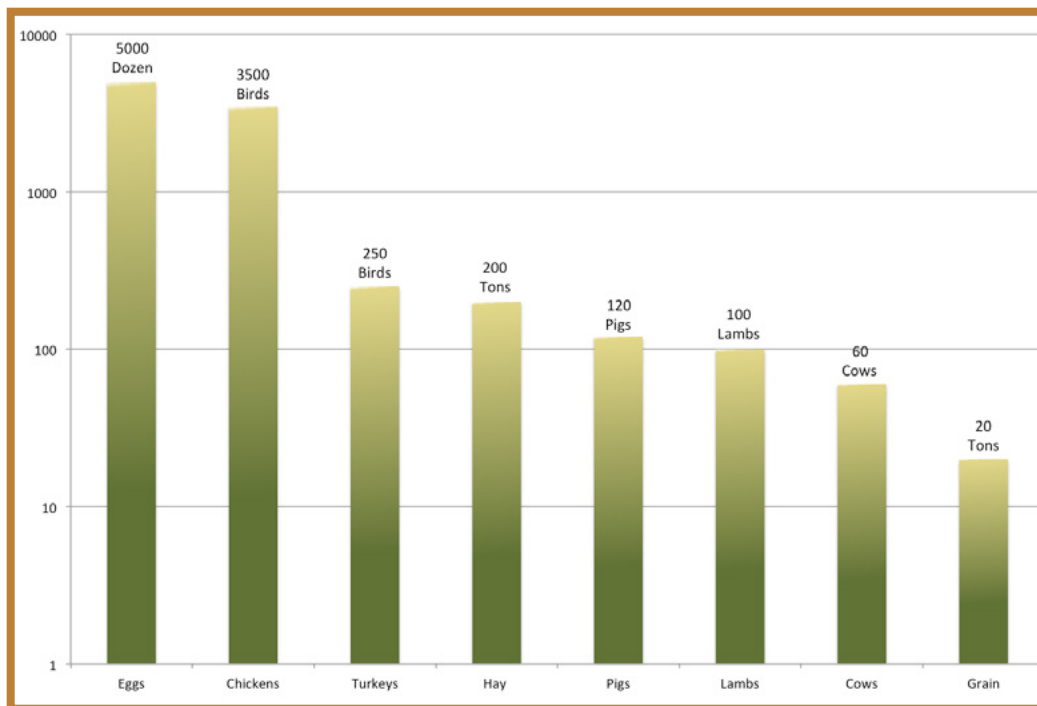
Stacking Species

Producing comparatively large amounts of meat from a small amount of acreage involves a process Louis has developed to “layer” various species of animals on the same pieces of land, each one a necessary part of a complete ecological cycle. Crops and animals are raised on a seven-year rotation, laid out to take full advantage of the farm’s eco-systems and the animals’ lifecycles.

When Louis and Jennifer took over the farm, it required one and a half acres of land to bring a cow to harvest weight; now it takes less than half that amount. Sheep, pigs, chickens, and turkeys have been added and the result is more meat production on the same amount of land.

Beef cattle eat the largest quantity of forage so they are the first species in the “stack.” On Crown S, cattle are fenced into paddocks with lightweight electrical fencing and are moved every 24 hours.

Sheep are confined in similar paddocks and rotated as well, however sheep crop the forage closer to the ground than cattle. Cows are kept on the pasture only long enough to



Crops and Livestock Produced on Crown S Ranch

It takes more than 400,000 pounds of hay and grain to feed enough livestock to produce 55,000 pounds of meat and 5,000 dozen eggs from five different species of farm animals.

Source: Crown S Ranch

eat the grasses down to about 3 inches; sheep will eat the plants further down.

Pigs are rotated in their own paddocks – moved every couple of days – on an area that will be used for a vegetable crop the following year. Because pigs overturn the turf, they are acting as living “rototillers” to turn the soil and fertilize it throughout a season, preparing it for planting.

Chickens follow the cattle through their paddocks and eat grass, bugs, worms, and the maggots that develop in the manure. By intervening in the lifecycle of the horn flies and face flies that attack the cattle, the chickens eliminate the need for pesticide treatment.

Each species grazes differently which controls weeds, pests, and parasites in different ways. And each in turn adds manure of differing character to build soil fertility and improve soil quality.

In developing the right ecological niches, Louis believes he can stack additional species on the same land, complementing those that are already there. This is similar to the way natural communities grow in complexity through succession.

Balancing Nutrient Flow

The principle objective of organic farming is to keep the right balance of nutrients on the farm. Many “cash crop” farms in Washington State fail to do this. Large acreage producers in the eastern grain-growing region of the Palouse, for example, depend on nutrients as concentrated commercial fertilizers from remote sources because their soils have become deficient.

Vegetable growers closer to metropolitan Seattle that are often located in floodplains on old dairy pastures may be “mining the capital” of fertility previously laid down. In both



these production models, there is an outflow of valuable nutrients in both grain and vegetables, resulting in a deficit.

In contrast, but just as discouraging, animal farms without a land base sufficient to produce their own feed require additional inputs of grain and hay. They in turn export a smaller amount of the nutrient base as meat while retaining a greater than needed amount in manure which can pollute surface and groundwater. Concentrated livestock operations can also cause an unacceptable level of nutrient buildup in associated soils needed to grow crops.

Intensive industrialized agriculture brings a plethora of problems. Yet, alternative, ecologically sensitive, and carefully planned small farms like Crown S Ranch are well set to meet the fertility/productivity challenge.

The best all around scenario for preservation of the environment, for improving the wellbeing of the farmer, and for producing nutritious, high quality food for the consumer is one that preserves the health of the soil by raising fertility to optimal levels and keeping it there. This is best accomplished by balancing the flow of nutrients internally.

An optimized fertility program is a challenge for any agricultural operation but easier to do on a mixed crop/livestock farm like Jennifer and Louis'. At Crown S Ranch,

a greater amount of the nutrients in forage and feed is excreted and mixed back in to the ecological foundation.

The actual animal products sold off the farm end up exporting relatively low amounts of nutrients. Therefore, when all the feed, including the farm-grown grain as well as the pasture forbs and grasses, are produced within its boundaries, the nutrient balance is maintained, soil fertility is optimal, and the Crown S Ranch ecosystem is closed.

High and Low Tech

By applying a combination of traditional and modern technology with careful animal husbandry, Sukovaty takes advantage of systems and processes to reduce the workload and eliminate the need for chemicals used as herbicides and pesticides or for animal health.

The farm is mapped using a computer-aided design and engineering application, which lets Louis plan the use of the farmland throughout the season. Paddocks for rotation are laid out, inputs and outputs are calculated, and irrigation systems are mapped.

Additional computer technology is incorporated in the solar-powered "chicken train" – light weight, yet sturdy, floorless wire houses that are moved across the landscape several times a day. Housing up to 100 chickens in each



of five units, the train uses a solar panel and circuit boards programmed with a laptop computer to power movement that takes 20 minutes to move 20 feet, three times a day. The solar panel also powers an automated watering system and the electric fence that surrounds the houses to deter predators.

The chickens graze and get their protein from the insects in the grass and fertilize the soil by scratching the surface to incorporate their manure.

On the other hand, a passive flytrap is a very low-tech solution for biting flies that light on beef cattle. From a pre-World War II design Sukovaty discovered on the Internet, he built a trap that brushes flies from cattle as they pass through it. The flies are captured in a series of mesh baffles and held there until they die. The dead flies are then composted or fed to the chickens if they need additional protein.

By resurrecting certain elements of traditional animal husbandry, Louis has eliminated the need to treat his cattle for pink eye and hoof rot. For generations, farmers in the Methow Valley assumed that the diseases were contagious because so many cattle have them. As a result, when a cow

was diagnosed with the diseases, the farmer gave the whole herd antibiotics to prevent the spread.

The cause is bacteria that grow in the soil and, while the diseases are not contagious, every animal in the herd can get them. Louis' research turned up a solution in a 1905 study conducted by Washington State University that indicated the bacteria grow in soils deficient in copper, like those of the Methow Valley. Conventional farmers will use antibiotics as a preventative; Louis simply adds traces of copper to a salt lick and the cattle stay healthy by ingesting the copper they need.

Closing the Circle

On Crown S Ranch, Jennifer and Louis have focused on developing ecologically balanced management processes to turn the farm into a closed system. Ultimately all inputs come from the farm and everything except the meat that is sold as food will stay on the farm to become part of the nutrient cycle.

The cattle, pigs, and laying hens are born on the farm; the broilers and turkeys arrive newly hatched. Much of the lumber used on the farm for fences and buildings is harvested from the land; the rest is scavenged and recycled.

Kitchen scraps are fed to the animals with the understanding that no animal will be fed scraps of the same species. Offal, feathers, and other waste from harvesting the animals is composted and spread on the fields to nourish the soil.

The hay needed to feed the cattle and sheep through the winter is grown on the farm and Louis plants a variety of grains together to grow feed for the chickens, turkeys, and pigs. Instead of planting fields of mono-crops, then mixing the grain after it is harvested, he is "mixing the feed" in the field by growing the grain together in the proper proportions. As a result, he harvests "feed" not grain.

By working with natural systems as part of the local ecology, Jennifer and Louis have eliminated the use of chemicals, fossil fuel fertilizers, and preventative antibiotic treatments. "Create a healthy environment and you will have a healthy animal," says Jennifer. "That's why our motto is: Better for the animal, better for the environment, better for you!"



Organic Farming: Better For the Environment*

Organic farming is often falsely represented as being unscientific. However, despite the popular assumption that it sprang fully formed from the delusions of 1960s hippies, it has a more extensive, and scientifically respectable, provenance.

Skeptics have often misrepresented a biologically-based agriculture as if it is nothing but the substitution of purchased organic inputs for purchased chemical inputs. Biologically-focused farming bases fertility maintenance on proven farming practices and locally available waste products.

Louis and Jen have implemented organic farming processes for more than a decade, following these basic principles:

Enhancing biodiversity: The aim of a biologically-based agriculture is to cultivate ease and order rather than battle futilely against disease and disorder. This includes practices such as growing a wide range of crops, sowing pastures with many different leafy plants in addition to grasses and legumes, carrying a mixture of livestock, establishing hedgerows for wildlife habitat, and so forth. The more ecologically-balanced components involved, the more stable the system.

Crop rotation: Firmin Bear (a Rutgers chemist in the first half of the 20th century) stated that a well-planned crop rotation is worth 75% of everything else the farmer does. Louis has proven that animal rotation – both through selected paddocks and ordering of species – reduces pest problems and results in increased soil fertility.

Green manures: Deep-rooting legumes not only fix nitrogen, penetrate hardpan, and greatly increase soil aeration but also bring up new mineral supplies from the lower depths of the soil.

Compost making: Of all the support systems for the biological farm, none is better than the world's best soil amendment, compost, which can be made for free on the farm from what grows there. All plant and animal waste generated on Crown S Ranch is returned to the soil as compost.

Mixed Stocking: Raising animals and crops on the same farm has both symbiotic and practical benefits. The crop residues feed the animals and the animal manures feed the soil.

Ley Farming: After 3 to 4 years in grass and clover pasture, the fertility of land plowed up for row crops is close to that of virgin soil because of the enormous amount of plant fiber added by the perennial plant roots.

Undersowing: Establishing an additional green cover crop beneath the main grain crop (such as peas) can often increase the organic matter in the course of the year without any reduced yield of the base crop.

At Crown S Ranch we employ systems, fitting the animal with its habitat and adjusting the levels of different animal associations (cows, pigs, chickens, sheep, etc.) through the seasons to maintain fertility and balance nutrients while increasing overall productivity.



Meet Your Meat

While imagining that the beef they will be eating came from a cow living a happy-go-lucky life, frolicking on lush green pastures until a gentle and painless end, the average American does not want to meet their dinner while it is still standing.

However, the idea that you *could* if you wanted, or at least you could meet the farmer who raised your dinner, is not so far fetched. Buying beef raised by growers like Crown S Ranch means you can indeed track your meat back to the farm and even to the individual cow.



Pasture Cows Improve Soil Fertility

Where's the Beef... From?

In one of the early episodes of **Portlandia**, Carrie and Fred discuss in detail the origin of the chicken they are offered for dinner. Colin (the prospective entree) has a bound CV to document his birthplace. While a book that weighs more than the chicken in question makes for good satire, how do we learn more about the origins and sources of the meat on our plates? Colin may have had references, but very few of the animals slaughtered for your dinner get such recognition.

There are simply no good ways to track a single chicken, pig, or cow from farm to plate. Walk into any conventional

big name supermarket and you'll find miles of plastic-wrapped Styrofoam trays full of bright red steaks, roasts, and ground beef. You're not likely to see any labels identifying where it was born and raised.

Over the last 70 years, the beef industry has evolved into an intense, industrial enterprise designed to put as much weight on animals as fast as possible and get the resulting meat to market as quickly as possible.

Agnes the Angus is nothing more than a meat factory packed cheek to jowl into feedlots and she (he?) is fed grain – lots of grain, most of which is genetically

engineered – and antibiotics, hormones, and steroids to bring her (him?) up to the target weight for slaughter in less than a year.

In 2011, more than 34 million beef cattle were slaughtered, producing more than 26 billion pounds of meat. Just four companies control 84% of the beef packed for sale in the US. In some slaughterhouses (the old-fashioned name for "meat processing plants"), a single pound of ground beef could contain meat from dozens if not hundreds of different cows.

Consideration for the animals and the consumers who eat them has been overtaken by the drive for profit. In response to the damaging impact of feedlot production, more and

more farmers and ranchers are choosing to return to, and improve upon, traditional methods of raising cattle on grass.

Better for the Animals

Beef cattle are ruminants; that is, they have multiple stomachs. They are able to digest plant cellulose by regurgitating the semi-digested plants and chewing them again to break the matter down further. The roughage provided by grasses and other plants allows ruminants to produce saliva, which helps neutralize acids that exist naturally in their digestive systems.

When taken off forage and put on a diet of grain and other byproducts – many of which should never cross the lips of a cow – the animal produces less saliva, causing an increase in acidity within its digestive tract. In response to the acidosis, cattle will kick at their bellies, stop eating feed, and eat dirt. To treat the problem, they are often given plastic feed pellets for roughage, along with lots of chemicals, additives, and antibiotics.

Grain-fed cattle often suffer from a number of health problems including intestinal damage, dehydration, liver abscesses, respiratory and cardiovascular failure, and death – the ultimate “health problem.” There are estimates that as high as one-third of all feedlot cattle develop liver abscesses.

In industrial livestock operations, to both encourage growth and prevent diseases caused by overcrowded and unsanitary confinement conditions, antibiotics are regularly added, often from a very early age, to the feed and water of animals that are not sick. As a result animal agriculture consumes 80% of all antibiotics used in the US, and 74% of all antibiotics formulated for human use. Because these drugs are given in “sub-therapeutic” doses, they may actually stimulate the emergence of antibiotic-resistant organisms more than full-strength dosage.

Combining rotational grazing and using elements of traditional animal husbandry has made it possible for Louis to raise healthy cattle using organic processes that produce delicious meat entirely on grass and hay, the way cows are supposed to be fed. It’s important -- Crown S Ranch uses no grain, no hormones, and no antibiotics and that is entirely different than with most commercial beef raisers.

All inputs come from the farm and everything except the meat sold as food remains to become part of the nutrient cycle.

All the pasture plants, as in the prairie ecosystem, have been selected for (evolved) to be grazed.

The rotational grazing improves soil fertility; the pasture system at Crown S is good at recycling nutrients.



Better for You

Americans eat more meat than ever before, and most of it is high in saturated fats. Researchers have linked serious health problems such as heart disease, stroke, diabetes, and certain types of cancer to heavy meat consumption. One way to avoid all those saturated fats? Grass-fed meat...

According to a study published in the *Journal of Animal Science* in 2002, and confirmed in a study published recently in *Nutrition Journal*, eating grass-fed beef provides a long list of benefits to consumers, not just lower fat.

Pastured meat is:

- **Lower in total fat**
- **Lower in the saturated fats linked with heart disease**
- **Higher in beta-carotene**
- **Higher in vitamin E (alpha-tocopherol)**
- **Higher in the B-vitamins thiamin and riboflavin**
- **Higher in the minerals calcium, magnesium, and potassium**
- **Higher in total omega-3s**
- **Healthier ratio of omega-6 to omega-3 fatty acids**
- **Higher in CLA (cis-9 trans-11), a potential cancer fighter**
- **Higher in vaccenic acid (which can be transformed into CLA)**

Lower Fat – Meat from grass-fed cattle is much lower in fat, and therefore lower in calories. A 6-ounce steak from a grass-fed animal has almost 100 fewer calories than the same sized-piece from a grain-fed animal. The average

American eats about 67 pounds of beef a year. Switch to grass-fed beef and you'll save nearly 18,000 calories a year.

Omega-3 Fatty Acids – Omega-3 fatty acids are fats that are essential to human health. Sixty percent of the fatty acids in grass is omega-3, which is formed in the chloroplasts of green leaves. Meat from grass-fed cattle can contain as much as two-to-four times more omega-3 fatty acids than grain-fed animals.

At the same time, a high ratio of omega-6 to omega-3 fatty acids has been linked with an increased risk of cancer, cardiovascular disease, allergies, depression, obesity, and autoimmune disorders. A ratio of four to one or lower is considered ideal, grain-fed beef has a much more balanced ratio of omega-6 to omega-3 fatty acids than wild game or grass-fed beef. In grass-fed beef the ratio is approximately 2 to 1, while the ratio in grain-fed beef is more than 14 to 1.

More Vitamins – In humans vitamin E is linked with a lower risk of heart disease and cancer. Meat from pastured cattle is four times higher in vitamin E than meat from feedlot cattle and, interestingly, almost twice as high as the meat from feedlot cattle given vitamin E supplements.

Rich source of CLA – Meat from grass-fed animals is the richest known source of "conjugated linoleic acid" or CLA. Grass-fed cattle have been found to produce 2 to 5 times more CLA than cattle fed high grain feedlot diets. In laboratory animals, a very small amount of CLA greatly reduced cancerous growths.





SUSTAINABLE
FARMING
Since 1968

100% Organic Pasture Raised Meats



Small Farmers Need Small Slaughterhouses

Farming north of the 48th parallel means short growing seasons and long winters. Raising meat animals rather than produce in the North means that farmers can have products available for delivery almost year round. Producing good beef from healthy cows on sustainably managed pastures and hay is something Crown S Ranch does well.

Small farms like Crown S don't fit into the "industrial network" that has been built to handle hundreds or thousands of cattle and link huge processing plants and the ubiquitous supermarket networks. Jennifer and Louis have had to build their own processing and distribution networks.

Getting the cow to the butcher and the meat to the consumer requires some fancy footwork, particularly during the winter. It's the supply chain – first the meat processing and then finished product delivery – that gives Louis and Jennifer fits.

Selling packaged meat cuts to consumers, chefs, and retailers requires that the meat be slaughtered and "cut

and wrapped" in a meat processing facility that has been licensed by the US Department of Agriculture. When the nearest facility is 190 miles away, it takes two round trips (one to deliver the live cattle and one to collect the packaged meat) plus loading and unloading time on both ends to process 6 cows at a time. Jennifer – the designated driver – is on the road 8 to 10 hours (even longer in winter) for each trip.

Do It Yourself

Small farmers in the West who are raising meat and poultry need affordable – and legal – slaughterhouses. Nearly all the meat and poultry consumed in the US today comes from just four companies that operate their own USDA-inspected processing plants. Most of the remaining meat processors – beef, pork, lamb – do not process poultry. And if you are raising organic poultry your choice of a processor may be hundreds of miles away.

Farmers are experimenting with a variety of solutions including mobile slaughterhouses. Several have been licensed in Montana, Washington, and California; unfortunately they are expensive to build and operate.

A federal exemption allows farmers who raise 20,000 birds or fewer annually to get a state license to butcher their poultry themselves. That option is costly and time-consuming. However, Jennifer was able to overcome those hurdles in Washington, though it took her five years negotiating a legal maze that required five different permits before she and Louis could open their facility.

They now have a state of the art organic-certified, Washington Department of Agriculture-certified poultry slaughterhouse where they process their own chickens and turkeys.



Delivery Dilemmas

Jennifer and Louis use all sales channels available to them: direct to the consumer, buying clubs and CSAs, wholesale to food markets and restaurants, and their own farm store. Every sale and every delivery is critical to keeping the cash flowing. Yet when your nearest market of any size is hundreds of miles away, making winter deliveries can be hazardous.

Winter to farmers in the rural Northwest is just another season. You add layers, change your boots to something heavier, make sure all the animals have plenty of shelter and fresh water, and put chains on the tractor or truck. Snow is simply another element you deal with and it rarely interferes with business, school or home life.

Snow in a city like Seattle is like an invasion by a foreign army. Businesses and schools close at the hint of a flake. Add the fact that most streets don't get plowed and you have a recipe for slips, slides, bumps, and crashes on nearly every thoroughfare.

Getting packaged meat into Crown S Ranch's commercial freezers is only half the supply chain challenge that Jennifer and Louis have to deal with. Most of the farm's orders for cut meat come from the Seattle area where customers are 225 to 240 miles from the farm. And in winter, the hurdles get even higher.

Even the smallest snowfall in Puget Sound can cost Crown S a tremendous amount of time, effort, and money. While the show must go on, sometimes the meat just doesn't get delivered. Multiple round trips – at a cost of nearly \$200 per trip – and days of driving on snowy roads take their toll physically, mentally, and emotionally.

What's the solution? It isn't possible to move the farm closer to the city, and certainly not possible to move the customers closer to the farm. At this point, alternatives include:

Locating a cold storage hub in Seattle to store large quantities for distribution in Puget Sound.

Pros: closer to customer base, simplifies distribution

Cons: added cost, complicates inventory management, reduces ability to manage last minute orders/special requests

Sharing transportation (truck pooling) with neighboring farmers who also deliver into Puget Sound.

Pros: shared transportation cost, shared driving responsibilities

Cons: may require changes in distribution points, perhaps delivery to a central location rather than "depot" deliveries, may limit the amount of inventory that can be delivered, e.g., truck too full

Shipping via UPS or other carrier.

Pros: transportation cost relative to weight of order, delivery simplified, reduces travel costs and vehicle maintenance

Cons: may add cost to delivery, limits products that can be shipped (do you know how to ship eggs without breaking them?), warm temperatures may make carrier delivery impossible.

As cities continue to grow and farmland moves farther and farther away, these are challenges that small family farms will have to manage, in order to maintain a direct connection to their customers.



If we don't find ways to resolve transportation and distribution hurdles, we are doomed to getting our food through the complex, high-energy networks maintained by the conventional food system; a system controlled by only a handful of mega-producers.

Selling From a Small Scale Integrated Livestock Farm

Walk into any supermarket and take a stroll through the meat department. While the department is divided into multiple sections – the beef section, the pork section, the chicken section, and so on – in most cases each one is filled with meat from farms specializing in one kind of animal. There are beef farms, pork farms, sheep ranches, chicken farms, even egg farms – and none of them would ever consider mixing any other species with those they specialize in.

Industrial agriculture is a manufacturing system based on efficiency and to raise animals efficiently, the farmer needs to concentrate on one species. For example, cows require very different food and living environment, as well as methods of slaughter and processing, from poultry, and pigs are different from both.

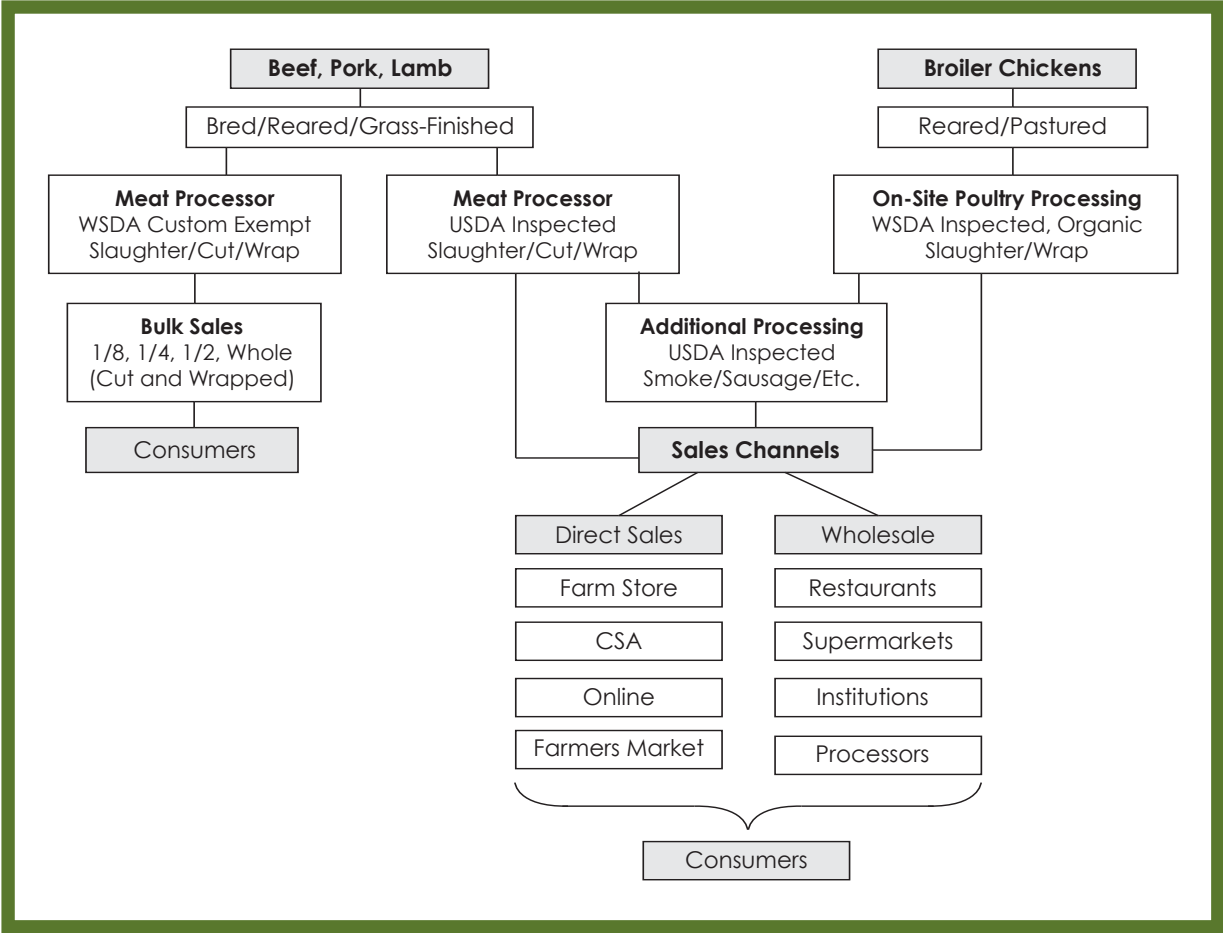
As opposed to today's monoculture farms, Crown S is a small, integrated livestock operation that produces beef,

pork, lamb, chicken, eggs, turkeys, ducks, and rabbits. Throw in a few pets (a dog, a horse, and a some cats) and you have quite a menagerie. And Crown S makes meat and eggs available to consumers from the Methow Valley to Puget Sound through a wide range of sales and delivery channels. Those sales channels – direct and indirect – are often dictated by the meat processing facility.

Meat Processing Drives Sales Channels

Selecting a meat processor is a complicated decision, requiring a balance of season of the year, travel distance, cost, organic certification, and inspection processes. A little more than a century ago, a farmwife could slaughter a few chickens and offer them to sale to her neighbors; a farmer could butcher a pig, cut it up, and even deliver it to a chef at a neighborhood restaurant without inspection or oversight.

In 1906, the **Federal Meat Inspection Act** was enacted to ensure that meat was slaughtered and processed under sanitary conditions; the inspection of poultry products wasn't required until 1957! Today Crown S deals with three types of processing facilities: USDA inspected slaughter houses, WSDA custom exempt facilities, and a WSDA inspected poultry processing facility right on the farm.



Each of those inspection, approval, and licensing systems determines how and where Jennifer and Louis can sell their products. Meat processed in a **USDA inspected facility** can be sold direct to consumers, through a farm store or online catalog, and wholesale to markets, restaurants, institutions, and other food processors.

Meat from large livestock that is handled by a **WSDA custom exempt operation** can only be sold by the meat processor to the end user; that requires the farmer to sell a whole animal (or as little as 1/4 of the carcass) to up to four “documented” owners. In reality, Crown S is delivering cattle that belong to consumers to the facility for slaughter and processing.

The meat is then divided into the required number of segments – as evenly as possible – and each buyer pays the processor for a portion of the slaughtering, cutting, and wrapping costs, after having paid Crown S for part of the animal.

The good news about buying meat sold as a “quarter or half” is that it is much less expensive than meat available in the supermarket. There are some downsides:

- **The buyer will get a lot of meat at one time and will generally need a freezer to store it.**
- **There is no real way to specify which cuts are included; after all there are only so many hams on a pig or standing rib roasts on a cow.**
- **The meat may be available only seasonally, especially if the animal is grass-fed or pastured.**

While it is not easy to become licensed to operate a poultry processing facility right on the farm, it is an option for farmers who raise fewer than 20,000 chickens or 4,000 turkeys. WSDA licensing for small poultry operations means

that Jennifer and Louis can slaughter, process, package, and freeze whole birds right on the farm, on their own schedule, and sell them direct and/or wholesale.

Sales Channels For a Small-Scale Integrated Livestock Farm

Sales channels through which small farms sell their products – from produce to meat, and occasionally prepared food – have evolved. For millennia, farmers sold what excess they produced over their own needs to neighbors who came to the farm, collected an assortment of food items, and paid for them with exchange of their own products. On market days farmers brought their excess to towns and villages and sold to housewives – and restaurants – direct from baskets, carts, and wagons.

In Seattle, by the turn of the 20th century, “farmers brought their vegetables, fruit, milk, dairy, eggs, and meat to the city by horse drawn wagons and by ferry from the nearby islands. The goods were purchased by wholesalers, who then sold the goods at a commission at warehouses on Western Ave. In this system, farmers occasionally made a profit but increasingly only broke even or lost money.”

In 1906 and 1907, the price of produce soared putting higher and higher margins in the pockets of the wholesalers and leaving both the farmers (who weren’t benefiting from the markup) and consumers angry.

By the summer of 1907, Pike Place Market was converted to a public market where farmers and consumers could meet and do business directly, cutting out the wholesalers. On the new market’s first day, August 17, 1907, crowds descended and produce was sold out in minutes. Within a week, more than 70 wagons lined up daily to sell their goods.



Today, small farms have a number of alternatives, both direct and wholesale to sell products to consumers looking for responsibly grown and processed meat and vegetables. Direct sales fall into 4 general categories: Farmers Markets, Farm Store (on the farm), CSA (Community Supported Agriculture), or Online.

An on-farm Farm Store is the most straightforward sales relationship between farmer and consumer; the buyer goes to the farm, selects an assortment of seasonally available products, pays the farmer, and leaves with their choices.

Most often on-farm direct sales consist of fruits, vegetables, and eggs. Meat sold by the cut from a farm must be processed through a USDA inspected facility, while poultry can be processed and sold, in Washington, from a state inspected facility if production volumes are low enough. "Direct from the farm" sales may be facilitated through a CSA purchasing arrangement and/or an online catalog or other e-commerce application.

Farmers Market sales add the complexity and expense of participating in organized, scheduled markets that promote

both the markets and their regular vendors. Sales made at a farmers market may be subject to a flat fee, a percentage of sales, or both, paid to the market managers to fund the market organizations. Farmers markets also add labor and expense to the sale in the form of equipment and supplies, booth staff, and transportation

Crown S Ranch takes advantage of all four direct sales opportunities, from the farm and by delivering to consumers, generally at agreed-upon depots or drop locations. Jennifer no longer sells products at farmers markets, simply because of the amount of time needed to set up and take down a booth and staff it.

Wholesale sales also can be categorized into 4 major groups: Restaurants, Supermarkets, Institutions, and Processors – companies that repackage or apply additional processes or preparation to the food items before sale to a consumer. "Farm to table" restaurants seeking local suppliers will buy direct from farmers, as will some institutional buyers. However, unless chefs and institutional kitchen managers are skilled in "whole animal" cooking,



small farms will have problems providing the most desirable cuts. It is easier to deliver hundreds of pounds of ground beef, than 100 T-bone steaks, when you slaughter only 6 cows at a time.

Relationships with food processors making sausage, soups, and prepared products like tamales simplify the farmers' sales requirements because the processor is able to break down and use minimally processed cuts of meat. These are the types of relationships that Jennifer seeks and when she finds the right partners, cherishes them.

Selling wholesale adds a layer of complexity when farmers want to offer products to supermarkets. There are fewer and fewer independent markets and even small family-owned chains or food co-op groups require that products come through a selected group of distributors. The benefits to a supermarket group of purchases through distributors are:

- **A single source from which to purchase and a simplified process.**
- **A single accounting relationship, which limits the number of invoices submitted and payments required.**

- **Distributors often hold their vendors to strict food safety requirements and have been held responsible in some cases for delivery of contaminated or adulterated products.**
- **Distributors buy in large quantities and can get better prices.**

There are a number of challenges faced by small farmers should they choose to sell through distributors:

- **The distributor marks up the farmers' cost when selling to their retail/restaurant customers, which, depending on the category and amount of markup, can result in a much higher retail price on the shelf.**
- **Distributors buy in quantity, requiring farmers to box and deliver food products on pallets or by a truckload.**
- **A close relationship between the farmer and the supermarket buyer has been "disintermediated" by the distributor, and the connection between the farmer and the consumer is lost.**



Tough Choices and Hard Work

Jennifer and Louis use all sales channels available to them: direct to the consumer, buying clubs and CSAs, wholesale to small food markets, restaurants, and processors, and their own farm store. Every sale and every delivery is critical to keeping the cash flowing.

The time has come to make some hard decisions: which sales channels are most effective, which generate the most profit, and which are the most important to maintain connections between consumers and the food they eat?

Is it more practical to seek out institutional buyers looking for large quantities of meat in primal cuts and dozens of whole chickens, than to sell – and deliver – a few pork chops, a pound of ground beef, and a dozen eggs to a handful of online shoppers? Is it time to give up the hours of time dedicated to farmers markets located 250 miles away, which entails nearly 10 hours of drive time, 5 hours of booth

time, and hundreds of dollars worth of gas? Will it mean the substitution of those institutional buyers for the shoppers at the on-farm store?

Raising livestock on a small integrated farm is hard work and takes a very special set of skills. Selling the meat from that livestock is just as hard work and requires its own set of skills. Jennifer and Louis have divided the work load – he farms, she markets – and each has chosen the area they know best.

Unless consumers, retail buyers, chefs, and other food processors recognize the quality, the taste, and the value of their products, Jen and Louis will have to find other ways to deliver the meat they have grown with their hard work – and yes, blood, sweat and tears. Meat that they believe is, “Better for the animal, better for the environment, better for you.”

End Notes and Links

Sources and Resources

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