

# **The First Year in the Development of Lopez Community Farm C.S.A.**

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## **Introduction**

A year and four months ago we heard about a little place called Lopez Island. We had been touring farms all summer looking for just the right fit. We had started in California, and after visiting about twenty farms we had just arrived on the other side of the country, Massachusetts. It was then, in August, that we started a cyber-romance with Henning Sehmsdorf. He is the one who told us about Lopez Island, for that is where he lived. To our amazement his wife, Elizabeth, and he were offering land, resources, and capital to start a small CSA on their farm, S&S Homestead.

After several initial phone calls of courtship with Henning, we headed back west, this time making a bee line for what seemed like an exotic little place in the far corner of the country. Once we hit the coast we drove onto an odd vessel that floated us out into the Pudget Sound, and through the magic isles of the San Juans. While sitting on deck of the ferry we looked out over the sparkling waters and islands washed in the golden orange of sunset and shared our last beer. It was a moment of almost as much fear as beauty and excitement. I remember feeling raw and on the edge of what might have been panic.

Except for a handful of trips to the mainland, we have been on Lopez Island ever since. In that time, with the help of Henning and Elizabeth, and a great many others from the community, we have developed a plan for a CSA, taken it through its first year, and found that Lopez Island embraced it and wants it to continue. In that time we have also become engaged and have decided to move back home, to Napa, California to work on the family farm.

The last year has been filled with calculations, hoping, guessing, mistakes, faith, failures and successes. Jesse had a couple years of experience managing a small CSA before, and Lisa had experience on farms as well, but neither of us had started a business from scratch before. It was quite a project that took a lot of work and was ultimately very rewarding. We realize what a silly thing it is to start a CSA and then to leave after the first year. It is not something we will ever do again, but looking back on it, we wouldn't change our decision to do it either. The CSA was a success, 45 families ate locally for six months because of it, and the work last year paved the way for others to come and pick up where we left off.

This paper will cover what we learned and the techniques we used in developing the CSA. Hopefully the next farmer will use this paper to start from where we left off.

## **The Farm**

S&S Homestead is a fifty acre farm. They pasture beef and lamb, chickens and pigs. They grow vegetables and have a fruit and berry orchard. They have a milk cow and grow barley and hay for animal feed. What is undertaken on S&S Homestead is not necessarily decided by what will make the most money, but by what will create the most health and harmony between all the parts. All of the enterprises are designed and managed to intertwine with each other and create diversity and health on the farm and to minimize off-farm inputs. While enough money is made by farm production to support Henning and Elizabeth, money is only one consideration of many in the ultimate goal of feeding and keeping healthy the farmers and the farm.

Henning and Elizabeth see the need for handing the farm over as they grow older. Their vision is to put the land into a trust that would give a farming family secure access to the rights to farm and live here. This way the land and the farm that has been created over thirty years will continue to flourish and grow, instead of falling into the hands of developers or going fallow. As the farm continues to evolve, its needs change. It is this change of needs that has brought the idea of the CSA into the farm picture. To create a space a young family can step into means finding a way for the farm to make more money to support them. One of the ways this could happen is through the CSA.

The balance that the CSA needs to strike is on one hand making money to support the farmers and on the other, being integrated into the rest of the farm. This year, while we were scheming a way of making money on this commercial enterprise, we were also striving to keep the CSA consistent with the philosophies of S&S Homestead. Luckily

we agreed with these philosophies and were committed to pursuing their manifestation in the CSA.

## **Member Management**

Building good relationships with our members was one of the most important aspects to our success this year. We structured our vegetable pickup and communications throughout the season accordingly. Our goal was to teach members to internalize the value of local food and a food community through enjoyable experiences on the farm and in the kitchen. As the CSA farmers, one of our roles was facilitating an ordered experience for all members, and we planned our member interactions to meet this need from first contact. Thus, our marketing, record keeping, member communications, vegetable pickup, and worker share design were all thoughtfully undertaken with these goals in mind.

### **Marketing**

Our business goal was to enlist 45 full share memberships for the season. Initially, our first business plan had been developed for 60 memberships, which also allowed us a larger profit. Since there were so many unknowns this first year, most notably soil fertility, we decided to lower our membership goal to 45, ensuring a bountiful first season. We expected this decision to secure a good name for the CSA in this small community, where, if your members were not happy the first year, you might not find any members the next year.

We first made a timeline and dated goals. CSA pickup began in June, and we set a goal to fill CSA membership by May. In California, when managing the Arcata Educational Farm CSA, Jesse, despite heavy marketing work, was unable to fill CSA membership before pickup began each season. So we thought ours an ambitious goal. We set goals for when marketing materials would be published, distributed, and set

membership recruitment goals for the months leading to the first harvest. A single person was assigned the task of recruiting members so that we could be sure that communication between farm and customers were clear and continuous.

We began with a 3-fold brochure created on Microsoft Publisher which described the social goals of the CSA, how the arrangement worked, and a bit about us. Our big marketing debut was the weekend after Thanksgiving, at the Preschool Bazar, a holiday craft event. We publicized the new CSA while selling garlic and sheepskins. We made a beautiful cloth sign advertising our new farm enterprise that hung down from the table at the bazar, and also hung on the outside wall of the CSA distribution shed the first few weeks of pickup to help members locate the farm. After the event, several people called and signed up, our first members. At this time, we also set up a free business email account on Yahoo.com which we checked three times a week and which has been of invaluable use to us. We find that about ninety percent of our members use email regularly.

For marketing's sake, it helped us to have made several friends who were organizers in the community and advocates of local food. They passed out brochures and spread the word. We asked local businesses if they would allow us to place a stack of brochures on their business counter. We made signs advertising farm memberships with tear-off contact information on the bottom of the posting. We posted these around town 2 or 3 times over the course of spring. To encourage early sign-up, we advertised an early-bird price, but, being reluctant capitalists, kept the same price level for everyone. We sought out community functions and groups to present what we were offering to anyone who would listen. Plugs at the Master Gardeners, the garden club, local food charette, as

well as Lisa's position at school, allowed us additional opportunities for publicity. The Lutheran Church's "Food, Faith, and Sustainability" group also supported us in marketing through speaking to the congregation about our work. Thanks to them, several church members joined. We were also able to obtain enough funds from our new member community and with help from Blossom Grocery to fill two free memberships for a family and a senior in need of fresh food.

Then, unexpected marketing aid suddenly fell out of heaven. The local newspaper's monthly "green" columnist, Debby Hatch, published an article after New Year's touting CSA memberships as one of the best ways to support a New Year's resolution of "going green." Within a week of printing, we received over twenty new inquiries.

By mid-spring, while starting garden seedlings in the greenhouse, the CSA was still only half full. Though decided that the CSA would run that year, full or not, a half subscribed CSA would be an indicator that the market on Lopez was not large enough to fully support a CSA farmer. At this point, we employed another marketing strategy, asking our customers to market for us. We created the first of our weekly harvest newsletters on Microsoft Publisher, the "Lopez Community Farm Howler, including an article describing what was happening at the farm, and also asking members to spread the word about CSA memberships. Within one month after this first newsletter was sent out, we reached our membership goal. We sold out before the season started. We were relieved. A CSA would work on Lopez: it was proven. We could now focus on growing the food instead of selling shares.

## **Membership Recordkeeping**

For new members, a mail-in registration form was inserted into the brochure which collected the following information: payment plan option, contact info, and choice of pickup date. This sheet also informed members of “pickup rules.” The information from these forms was transferred to a single Excel “Membership” spreadsheet on which payment records were also kept. Paper copies of members’ registration forms were filed for hard copy double booking. Elizabeth also double-entered checks before they were taken to the bank to provide a fail-safe to guard against bookkeeping mistakes.

We gave members three payment options: a one-time up-front payment of \$450, a payment plan of four installments, or a worker-member plan of four installments at a discounted price. All members were required to pay their first installment of \$150 at time of registration. Payment records were updated daily as checks were received. Members were called or emailed if payments were late to remind them of their due balances.

## **Communications**

The following communication conduits were utilized most often with members: newsletters, emails, and announcements on the pickup board. Unless we employed all three methods of communication for a single message, we often found that a significant number of members would not receive the information. The old teacher’s saying proved true: “You have to tell them three times, three different ways.” We made efforts to keep communications tight and prompt in order to set the standard high. In a CSA, where the farmer initiates the creation of a new community, the farmer bears the burden of developing and communicating the initial relationship structure. People becoming

involved as members need to clearly understand the bounds and opportunities involved in what they are stepping into.

### **Vegetable Pickup**

New members were initially sent a welcoming email thanking them, inviting them to visit the farm anytime, and reviewing CSA pickup procedure. Closer to the date of the first pickup, all members received another email reviewing the process. We thought out all details before we created our registration form, so that the pickup rules were set before people signed up. The most important information communicated for pickup includes the following: members pickup date was either Monday or Friday, pickup was from noon-7 pm, people were to bring their own bags, call ahead if they weren't going to pick up that day, and any food that did not get picked up would go to Lopez Fresh, the food bank. Harvest pickup began the first week of June and ended the last week of November. We told members that in eating seasonally, they needed to expect that the size of the share would ebb and flow with the bounty of the season.

We set strict pickup rules, but made exceptions for people with scheduling difficulties, so they were able to pick up the next day or switch their harvest day a particular week. The number of special situations like these proved manageable and made members feel supported in the CSA relationship.

The first week of pickup, we worked near the pickup shed in order to be available to guide members in the process. This was also helpful in summer when members often sent house sitters or friends to pick up who were clueless about how pickup worked. The CSA experience often excited them, and this was great advertising for next year's membership drive.

At pickup, we used a large whiteboard in the shed to communicate what was included in a share each week and how much of each item the member could take home. The vegetable list from top to bottom matched the order of vegetable bins on the counter from left to right. We also ordered the list in the same way one would layer their vegetables in a bag, heaviest on the bottom, delicate on the top. Members were also asked to sign in. At pickup each week, our newsletter provided an update on farm happenings, recipes, and information on vegetables in the share. We invited members to contribute and received several great recipes.

Three weeks into the season our members were thoroughly trained in how to manage pickup themselves. This meant we could feel confident to work on other projects during pickup. Clearly, members enjoyed the trust and community spirit involved with pickup and some folks would ramble around for an hour or so to pick out their veggies, chat with their neighbors, and get into the field for u-pick.

The first weeks when u-pick flowers and strawberries became available, we left detailed instructions about where the items could be located in the field, the quantity available to each member, and constructed a marked string path leading to where u-pick items were located. We found a significant number of members confused, and, mostly found that they hadn't read the whole announcement. Eventually, members were properly trained for u-pick, but it took some time. The u-pick was very successful in the sense that it heightened members' feeling of intimacy and familiarity with the farm and saved us time. The u-pick crops were outlined in the brochure before members joined.

A few problematic situations arose concerning communications. One such situation involved a month-long period when there was lifting of vegetables going on!

Sometimes members forgot to sign in when they picked up. So, it was unclear for several weeks whether folks forgot to sign in or whether vegetables really were being lifted, until one day, when everyone came to pick up, everyone signed in, and one man did not get his vegetables. We knew vegetables had been stolen because we had already harvested lots of extra vegetables for that pick up.

Our procedure was to harvest all items in order to give the largest share possible. With people taking extra, this really put a kink in our system. Instead of confidently working on another project after harvest was finished, we would have to continue checking and reharvesting for what might be missing throughout the day. This was a great inconvenience to us since our daylight hours were so filled with growing food, and these extra tasks were unnecessary.

In response to theft, we kept our communications to encouraging messages instead of accusing. We wanted to avoid innocent members feeling subjected to a police state CSA. We crafted communications to remind people how important it was for them to sign in, the necessity for community mindedness for this venture's survival, and how our actions directly affected other member's ability to receive their fair share in the farm. We thanked everyone for doing their part. After some emails, newsletter announcements, and notes out on the board explaining the situation, the problem stopped suddenly. We were relieved and thankful that our approach had been effective. Basically, without reprimanding anyone, we reiterated the social goals of this venture, our concern, and peoples' moral center put them back on track.

Looking forward, even though this problem arose, we would do an open bin pickup scheme again instead of making boxes. It is very important to us and to members

to feel a sense of trust and community in the CSA, so often missing in modern life. Every harvest we could expect to spend extra 30 minutes reharvesting or tidying the CSA throughout the afternoon, and this gave us an opportunity to talk to members who were around at the time. Overall, this pickup scheme also saved us time in comparison to making boxes for members.

### **Worker Members**

We recommend tightening up the worker member communications in the future. The worker member option was contingent on the idea that worker members worked five hours per month during pickup and received a lower member price. We made this very flexible for them, too flexible, as it turned out. We initially asked all five worker members what they were especially interested in learning so that we could maximize their education on the farm. Most answered that they wanted to learn about growing food but didn't have specific goals. We found worker members to be most helpful during harvest when we gave them specific vegetable harvesting and processing tasks. Generally, they saved us a small amount of labor, and their value on the farm was mostly in their own education. Some were very diligent workers and fulfilled their promised hours, while others did not nearly meet their promised hours. We regret not keeping accurate records of this. Next season, we would recommend a sign-in and sign-out clipboard for worker members. We also recommend a guideline that worker members call the day before they work, so that appropriate jobs can be prepared for them.

Originally, we debated the idea of making worker time a necessary part of the contract for signing up in the CSA, encouraging the idea of community supported food production in its pure form. However, we did not require working as a condition for

membership this year, because we predicted more potential members than we could afford might turn away in an already uncertain market environment. After gauging members' motivation and abilities this year, we would not require worker hours as part of the membership contract in the future. As an alternative, we would more heavily recruit worker members, increase their responsibility, and provide more structure for them in working on the farm.

### **Future Member Involvement**

As a final communication, we created and collected anonymous evaluations about the CSA experience from members. This information, used in coordination with planting and harvesting records, will be valuable in creating a superior seeding plan for next year.

As community support for the CSA grows, we envision members taking a larger role in CSA structure. Since a goal of any CSA is community building, the more we encourage members to get involved have a say in what they are supporting, the more they will feel ownership in the project. Were we to manage the CSA again, we would invite all members to a meeting concerning budget, farmer's profit, price of shares, crop plan, creation of member committees, and outreach. This sort of meeting would build awareness about the actual work and costs of growing foods locally and sustainably, provide members a say in what is grown, and how much is grown.

We dream of motivated volunteer member committees working on issues such as the CSA as a community gathering place, caring for the perennial garden, producing the newsletter, planning seasonal celebrations on the farm, providing educational outreach, studying food systems and nutrition. Member leadership in these activities would give

the farmers more time to grow delicious food for everyone, provide educational experiences for members, and strengthen community on the farm. As the CSA becomes more established, and members grow to feel more empowered through the food, we believe visions like these will take form and bear fruit.

## **Crop Production**

The actual tilled area we worked with was a little over 51,000 square feet. At the east end above the pond, the tilled field is 150 feet wide. From there it gradually widens westward until it is about 165 feet wide. For simplicity's sake, in our crop planning we pretended that the entire field was 150 feet wide. The western beds ended up being longer than we planned and they produced a bit extra for us. We drew lines across the field every forty feet creating eight 40'x 150' blocks, each block being 6000 square feet, all eight being 48,000 square feet. These eight blocks became the production garden. At the far west end of the field, next to the CSA shed, a space of 30'x 150' was left over. This area became our perennial garden and spring garden.

### **Perennial Garden**

The perennial garden was placed directly across from the distribution shed to attract members as they picked up vegetables. We wanted to create an atmosphere of welcome and interest for members. This garden was not planted in straight rows, but in all kinds of small curvy and almost symmetrical beds. We planted all kinds of things, culinary herbs, biodynamic preparations herbs, landscaping herbs, flowers, and some annuals. The garden was a hit, and although at times it seemed to take more time to keep it looking nice than it was worth, that was never actually true. The beauty it presented to everyone as they walked through the gate was just as important as the vegetables. Next year it should be much better, as the plants will be established and the garden will fill in.

Next to the perennial garden, in the extra space, we put in five 90' long beds of strawberries. The five remaining beds to the west of the strawberries were on the highest

ground and dried out faster than anywhere in the field. We planted our earliest crops into these beds and called in the Spring Garden.

### **Production Garden**

The eight blocks to the east of the perennial garden make up the production garden. These uniform blocks make for an easy-eight year rotation plan. If a group of vegetables is grown in block A this year, they will be grown in block B next year, the following year they will be grown in block C. It will take eight years for that group of vegetables to rotate through all the blocks and end up on the same ground they started. Every piece of ground will have seven years of rest from any particular vegetable.

While planning, we grouped the vegetables into families and matched these families up to fill each block. We also designed the succession of vegetable groups moving through the blocks over time to benefit plant health. Eliot Coleman's *The New Organic Grower* helped in this process. In most cases we were able to keep all families together, but there were a couple situations where we had representatives of one family in two blocks. Most notably this happened with the brassicas. In block B we grew all the big brassica crops: broccoli, cabbage, cauliflower, kale and brussels sprouts. There was no room in the block for radishes, arugula, mustards, and Asian greens, so we put them in block F with the salad greens. This placement works well for cultivation because all the greens are together; however it split the brassica family up. Because we had two blocks with brassicas; we had to place the blocks as far from each other in the succession as possible, four blocks away. This way it will be four years before brassicas are grown in any particular place twice. That is not nearly as good as eight years, but is the best we could figure out.

## **Production Plan**

In the fall and early spring, while deciding how many members we wanted, how much vegetables we wanted to grow, and how much to charge for them, I called on past experience to guide us. The last CSA I worked at had sixty members, we gave small shares, and they were cheap. This is basically how our year manifested as well. It's a good thing that vegetable gardening is not an exact science, because our plans were formed by guessing, generalizing, crossing our fingers, and hoping for the best.

Originally, we planned for a sixty member CSA. For that number of people we wanted to plant five of the eight blocks. This would mean 30,000 square feet for sixty members, or 500 square feet per member. Looking back now, it looks like a small land to member ratio, but back then I guess it made sense. And for the price we charged, it did make sense.

In March, we decided to cut down the membership goal to forty-five because we wanted to concentrate the compost we had, and build up as much of the garden with cover crop as possible. For the first year it seemed prudent to plant half the field in vegetables, and half in summer cover crop. To cut the vegetable planting down to four blocks, we needed to cut the membership by roughly the same proportion. At forty five members, with 24,000 square feet, we would have 533 square feet per member.

In a survey we sent out to the members at the end of the season we asked what people thought of the quantity and value of the share. The general trend in the answers showed there was not enough vegetables to last the week for a four person family, and that the shares were a bargain. Next year we would want a share to feed a family of four, and wouldn't want too many people thinking that the vegetables are a bargain. We don't

want to over-charge for vegetables, but a CSA should not be about bargain hunting; the price needs to reflect what the food is worth.

Splitting shares seemed to cause some troubles as well. We only offered one size share this year. We didn't want to deal with the hassle of two sizes. But in the end people cut up the shares on their own anyway, and then complained when the amounts given didn't divide that well. It would be easier for the farmer to take on this responsibility. Members would be kept happy and things would move more smoothly.

If we were to do this again next year, we would do a couple of things differently. We would offer two share sizes, a whole and a half. The half would be almost as big as our share this year, and the whole would be twice that size. We would charge on a sliding scale. For the half share the middle of that scale would be somewhere around \$450. We would charge a little less than twice that amount for next year's whole share. My experience with sliding scales is that in the end the average payment is right down the middle of the range you offer.

To plan such a change into the production plan, we would assume that each bed will produce the same as it did this year and change the area proportionately to the estimated change of production. Although we want to work on increasing production of each bed, we wouldn't want to count on it in the plan.

## **Fertility Management**

Fertility kept me up at night in the beginning stages of designing the crop plan. Our goal was to create a garden that was both big enough to provide a living through a CSA and also small enough that the fertility inputs could be produced on the farm. Our major tools to create on-farm fertility were compost, cover crops and biodynamic preparations. It became clear early on that there was not enough on-farm material to fertilize the whole garden the first year. However it remains our goal to set up a system that would at some point in the not too distant future get most, if not all, its fertility inputs from the farm.

### **Compost**

The first week Lisa and I worked on the farm we made two beautiful compost piles with Henning out of sheep manure and spoiled hay. Looking out over what seemed a vast field, I tried to calculate how much compost we would need for this new garden. Any estimate I made amounted to more than we had on hand. I consulted several books and tried in vain to come to some approximation of what a ton of compost looks like in comparison to a cubic yard. I came to the bitter conclusion that weight is hard to guess and changes as moisture levels do. Even volume is hard to rely on and thus the cubic yard. After moving a pile, it is fluffy and deceptively mountainous; but in a few days it settles. Even if the pile seemed metabolically stable before moving it, air is mixed in as it is moved and usually the metabolism of the pile wakes up, and the pile shrinks more in the weeks after the move. By the time you are ready to spread it there is much less than originally calculated. I found calculation, while important, something to take with a grain of salt.

The soil test we had done showed 3% organic matter content. To raise this level we collected as much compost as we could from neighboring horse farms and tried to over apply compost rather than hit an exact amount. Our plan was to get the organic matter up to 5% or so in the first few years. After we built up the life in the soil we could work into a maintenance application that would come mostly if not completely from the farm.

We had ten to fifteen yards of compost made from on-farm manures to spread in the spring. To this we added about thirty yards of horse manure from the Mang's farm. We spread compost on the four blocks vegetables were being planted in, eight to ten yards per block. There was no compost spread on the other four blocks which were being planted in summer cover crop. We spread the compost by loading the trailer with the tractor, towing the trailer out to the fields, and shoveling it onto the blocks.

In the early fall we found a huge source of horse manure at Casey Buffum's farm. We took the tractor over to her barn and spent three days loading up our truck and trailer, driving it back to the CSA, and spreading it directly on the fields. We spread about forty yards on the four blocks that were grown in summer cover crop this year and would be in vegetables next year. The manure was mostly old and mixed with very small wood chips that break down slowly. We figured it would continue to break down in the field in the fall, and be ready to plant in the spring. There would be no need for spreading compost till the next fall. After we collected the forty yards and spread them, we collected another forty and made two windrows with them. Half of one of the piles we layered with spoiled hay to see if it would stimulate break down, it did: half of the pile heated up to 130 degrees, while the rest heated to 110 degrees. We built walls of spoiled hay around

both piles to keep leaching minimal over the winter and to keep in heat. Both piles were prepped biodynamically and covered with a thick layer of spoiled hay. The plan is to let these piles sit and spread them in the fall of 2008, at which time another two piles will be collected for the next year.

### **Cover Crops**

We sowed winter cover crop on the whole field in Fall. In 2006 we seeded a mix of rye, Austrian field peas, and fava beans. The seed went in too late, October 15<sup>th</sup>, and was sown too sparsely. The harsh winter, sparse germination, and small plants made for a very weak cover crop. In Fall 2007 we sowed a mix of oats, vetch, peas and fava beans in early October. We sowed more densely and now have a much better looking cover crop. The plants are bigger and closer together, although I think it would be better to seed even denser next time. In spring '07 we let the sheep eat down the winter cover crop. Because the crop was weak it made great grazing. Next spring, the cover crop will possibly be too big for effective grazing. Unless it is grazed earlier in the spring it will need to be cut, collected and composted.

To reduce the area we needed to spread compost on, and to increase the area which could benefit from cover crops, we finally decided to grow vegetables in only half of the available land. The other half we planted in cover crop all season. Of the eight blocks, every other one would be in summer cover crop each year, and each block would be summer cover-cropped every other year. This way the soil in the blocks will get a break every other year and the organic matter content will be built up with these cover crops.

Of the four summer cover-crop blocks, two were in grain (oats and wheat). The wheat we planted to harvest. The oats we planted to till in. However, the oats grew beautifully and I fell in love with them. I let them go to flower and then to seed. We ended up harvesting both grain crops. Of the two other summer cover-crop blocks, we planted one in red cow peas and the other in buckwheat. The cow peas did miserably. They germinated, and were healthy, but grew very slowly. They let all the weeds grow around them and it became a half-weed, half-pea field. We weeded out some of the worst weeds and tilled the remains in. I think the summer is just not hot enough for them here, and would not grow them again. The buckwheat did great. It grew fast, flowered, was beautiful, and we weed-wacked, and tilled it right into the ground.

### **Biodynamic Preparations**

Biodynamic preps were not used to their full potential this year, although we had perfect conditions to use them. All the preps are made on the farm and there was enough to go around, they were at our finger tips the whole year. We did spray the Barrel Compost prep in the spring two times, and 500 once. In the summer we sprayed 501 once, and in the fall 500 one more time. One of the first things I would do for next year is consult a biodynamic farming practices book to create a schedule of 500 and 501 spraying for the garden. Then I would stick to it and make sure to set aside time frequently for spraying and not push it off as I did this year. We prepped the two big compost piles set aside for next year. The compost spread in the spring and in the fall were not prepped for the simple reason that we didn't have them sitting around composting very long before we spread them. We basically took them from other farms already partially composted and spread them. There was no opportunity for prepping.

Now that there is a system to compost the manure for a year on the farm before spreading, prepping the piles will be easier. To move into a purely on-farm fertility program, the preps are very important and need more consideration.

### **Amendments**

The soil test showed that our soil was basically in good shape but needed additives. On top of having low organic matter, there was a boron deficiency, as well as need for a general boost in nitrogen, phosphorus, potassium, and lime. I had not used additives other than compost, lime and rock phosphate before and always assumed that in most cases good compost and biodynamic preps brought in enough minerals to grow good vegetables. One thing that puzzled me is that the soil test treated compost as a source of organic matter and nothing more. They suggested that the N, P, K and everything else needed should come from different sources than the compost. I knew that compost could provide at least some of these nutrients; however, I didn't have any experience with this field and had no idea how it was going to react to intensive vegetable gardening.

In the end, to make sure that the vegetables would grow, I took the soil test's advice and spread 400 lbs. of blood meal, 400 lbs. of greensand, 300 lbs of rock phosphate, 400 lbs of lime, 300 lbs. of gypsum, as well as 30 lbs. of zinc, and 7 lbs of boron over the entire eight blocks (48,000 square feet). I spread these amendments in the spring a couple weeks before the soil dried out enough to cultivate.

## **Tillage Methods**

In deciding tillage practices we tried to pick methods that were gentle to the soil ecosystem, didn't rely on big equipment, and saved us labor. This is a delicate balance to find, and the balance is different not only on different size fields, but on soils of different texture and structure as well. Tillage practices were further decided by what equipment was available to us. Being the first year on this field, we sometimes felt we were bumping around in the dark to find the right combination of methods most appropriate to the size of field and the condition of the soil. After only one year of tillage management on this field, we have a rather limited idea of what the best practices might be since we are not seeing long term effects yet. However, from past experiences, good advice, and books, we have a good idea of what the long term effects of these practices might be. In a year's time we saw improvement in the soil structure and feel fairly certain that the practices we used would work well over many years, both for vegetable production and health of the soil.

### **Opening the Field**

In late September of 2006 we opened the field up for vegetable production. It had been mostly in barley for the past three years and before that, pasture. We paid a neighbor to plow the field for the first time in at least thirty years. The ground was dry and very hard. In some areas the plow only sunk three inches. After several days of picking out rocks that had been pulled to the surface, we ripped with single tooth ripper borrowed from our neighbor, Eric Hall at Crowfoot Farm. We first ripped East-West, and then North-South. The crisscrossing broke up the ground maybe an inch or two deeper. A disk, also borrowed from Crowfoot farm broke up all the big chunks the plow

and ripper had brought up. Then we planted a winter cover crop and disked it in. This was all done by October 16<sup>th</sup>.

## **Forking**

In Spring the ground was saturated. It took a long time to dry on its own. We got into the garden by hand forking the surface. We plunged the digging fork into the ground and popped the soil up. The soil broke open and fell back to the ground. Large air cavities were formed and the soil dried out. Besides drying the soil faster, the forking broke up the hard pan the plow had been unable to cut: it reached deeply into the soil, popped out rocks, and created a surface the rototiller could grab onto. The forking did a wonderful job. It is very gentle on the soil and does not demand big equipment. However, it is easy to see where this method requires much physical work. Of the eight blocks, we forked the four in which vegetables would be grown. 24,000 square feet was a lot to fork by hand; any more and we wouldn't have been able to get through it. We felt great about doing it, but it also felt a bit abusive to the body. Doing it year after year could get tiring and wear someone out. One possibility is that forking is needed only once. The forking action might have a permanent effect on the structure of the soil, creating a soil that naturally lets in enough air to dry it, is not compacted, and receives the rototiller without forking. Or maybe the forking is needed only every other year. This would cut the forking per year in half and make it much more doable. While this might be wishful thinking, it certainly would be nice. If one did want to fork every year, one possibility is to find several strong and willing workers to get it done all at once. It would probably take ten good forkers a day or two to fork 24,000 square feet. The forkers could be CSA

members and paid in vegetables, or others paid in money. One way or another we saw very good effects from the forking.

### **Ripping**

The four blocks in successive cover crops were ripped instead of forked. In the spring the ripper sunk into the ground very nicely because of the moisture in the soil. The problem with the ripper available to us was that it only had one tooth. To get the fractured tooth-ways close enough together, we had to run the tractor so close to the last pass that the wheel ended up running over the last tooth-way. This creates two problems: one is that we are smashing the soil back down we have just ripped. The second is that we have to make too many passes over the field. However, the consensus is that the tooth breaks up the soil deeply and the tractor wheel only smashes down the soil surface, leaving the subsoil fractured. However, in smashing down the surface, air did not penetrate as well and the soil did not dry as quickly as the forked soil. Running the tractor over the field every foot and a half in two directions is excessive, but is the only way to get the tooth-ways close enough together. Even then the soil was not broken up nearly as well as the forked blocks. In fact, when we had finished forking three of the four blocks, we were so tired of it we decided to rip the last block. As we were preparing beds in that block the rototiller would not sink in, it skidded over the surface and jumped over chunks. We could not make decent beds and were forced to go back and fork the whole block before planting anything. After that the beds shaped beautifully.

The ripper unfortunately was not perfect. It broke things up enough in the spring to seed cover crop; however, I think a disk might have been a better tool for the job. I once thought, if only we could get a sub-soiler with multiple teeth. Then we wouldn't

have to run over the field as much and the tooth-ways would be closer together. But Henning pointed out that a bigger tractor would be needed for such an implement.

### **Rototilling**

To shape the beds and get good tilth, we used a walk-behind rototiller. It is a small tiller and the tines reach only two feet wide. If I were to buy a new rototiller for this garden, I would get a bigger one. It would save time and energy, but this little one did a good job anyway. The soil is naturally very crumbly and after a forking, broke up on the first pass without fighting about it. If we forked first, the rototiller left the beds with good tilth ready for planting or seeding into.

## **Irrigation**

On Lopez Island, fresh water is sacred and used accordingly. Geographically isolated and surrounded by salt water, freshwater is very limited. Out of necessity, island farmers most often irrigate agricultural operations out of ponds dug on their property. On S & S Homestead Farm, the CSA water system predated our arrival. A pond was installed at the southeast corner of the farm, draining the whole farm, immediately east of the CSA field. Filling during the winter and spring, it is mainly used for irrigation between the months of June-September, the drought season. The 750,000 gallon pond was sized to accommodate at least a 2-acre intensively cropped vegetable garden. Beyond the CSA, the pond also waters the orchard, the homestead garden and greenhouse, and cleanup around the barn.

## **Well Water**

There is also a well spigot supplying the CSA field. Though prohibited for agricultural use by the well association, we found it necessary to use this water for several tasks due to perceived solar pump system limitations. These tasks were as follows: watering in transplants (heaviest usage between May-July), watering greenhouse seedlings (February-June), watering the perennial garden (April-September), and washing vegetables (June-November). We aimed to be conservative, but after Henning received a report from the well association, came to realize that our C.S.A. well water use was far from sustainable. The record showed a spike of % rise in farm well water use comparing usage in 2006, at , and 2007 usage at . 2007 was the month we watered in most of the transplants for the growing season and also began watering the perennial garden twice weekly.

With its odd snaking bed shapes, the perennial garden was a drip tape nightmare. Thankfully, perennials will be more established next year and will need less water. For next season, it will be necessary to stop well water use in the perennial garden. This could be accomplished by watering the perennial garden off the solar pump by using bendable emitter tubing.

Another well water conservation measure that must be implemented next year is watering in transplants and greenhouse seedlings with hoses that can attach to the header pipe from the pond irrigation system. A challenge with this idea is that the new managers must plan their transplanting schedules with strict attention to available sunlight. When the day starts to cool off they must be poised to transplant seedlings if necessary, but also must finish transplanting and watering in before the solar PV gain becomes inactive.

The same challenge applies to watering the greenhouse seedlings, as we prefer to water them first thing in the morning when it is still cool. The plants use water more efficiently in the morning. A simple solution to this problem could be planning ahead. One could fill the watering cans when the sun is shining, and then water anytime one chooses the next morning. Since we had no meter on the spigot, it was unclear to us how much well water we were using. Adding a meter and keeping records tracking usage will be necessary for next year's use.

### **Solar Pump**

The CSA irrigation system is powered by a single photovoltaic panel which powers a direct current piston pump. With a built-in pressure regulating system, the system is designed to turn on when pressure falls below 10 psi and pump continuously until 25 psi is reached. The pump is active during peak solar gain hours of 9 am- 5 pm in

summer, and fewer hours in spring and fall. This system is fit with a sand filter which is flushable for cleaning. Water is drawn from the pond with a hose through a screen that rests several feet deep in the center of the pond, suspended by a float. This solar pumped water is directed to the main CSA header pipe that runs down the north side of the field against the fence, or can be switched with a valve to pump into the underground farm cistern, the farm-to-school rainwater catchment tank, or to the orchard. This pumping system had been designed and installed through an Equip grant Henning secured from the NRCS, National Conservation and Resource Service, to encourage water conservation in the San Juan Islands.

A challenge of this system is that the pump and PV panel are not a perfect electric fit. The new CSA farmer should expect the fuse to blow at least ten times during the season. At these times, we had to replace the fuse, which only took a few minutes of work. However, fuses are expensive and the system would work much better if a better sized pump were installed.

Since the PV system was mounted stationary at an angle on the pump house roof, the power available for watering varied drastically between the hours of a day and between seasons. Thus, to avoid crop stress during peak summer heat, it is necessary for the irrigation manager to be very attentive to water needs, hours of power producing sunlight, and weather.

One irrigation system challenge, besides labor intensity, is that the solar system made it necessary to water during the hottest time of the day. Any experienced gardener knows that the heat of the afternoon is the least effective time to water plants. During the hottest days of summer, the watering system was pushed close to its limits of scale. Most

often, the system was adequate. Another PV panel added to this system would allow for an expanded garden. During several occasions we also had problems with the uptake filter in the pond clogging up. Remedy for this was a swim in the pond to clean the intake filter, a process similar to cleaning a huge bath tub shower drain.

### **Bed Irrigation System**

Considering the pumping conditions, we chose a thick ½ inch poly-tubing header to run along the length of the north side of the field. At each vegetable block, sub-headers were attached to the main header. These subheaders ran across the width of each block. Attached to these were low-flow 15 ml T-tape drip tapes, with 8-inch emitter spacing, running the length of each 150 ft. garden bed. Each T-tape line was attached to an on/off valve where it met the subheader line. Garden beds had 1-2 lines per bed depending on number of rows per bed.

“Dripworks” catalog advertised drip tape needing only 4 psi to function, allowing us to maximize irrigation hours with the product. During the course of a summer day, the number of lines that could be watered simultaneously peaked at 8 lines at about 1 p.m. During summer, pumping usually began about 8:30 am and pumped until 4:30 pm. At the tail end of each day, only one or two lines could be watered simultaneously. The new irrigation manager should be advised that there is significant frictional head loss, approximately 25% of psi maximum, as water travels across the field westward.

The T-tape emitted 30 gallons of water per 150 ft. each hour. There were approximately 55 lines of T-tape in the rotation at peak growing season. Once we became masters of the rotation, we could water everything in two days time. We estimate that it was possible to water 26 lines per day during peak summer hours. That is 6 lines

dripping at a time for 8 hours/ day, each line dripping 60-90 minutes. At this rate we utilized a total of 1440 gallons of pond water per day in the summer. We probably used half this amount in spring and fall, assuming the irrigation season lasts from May through the second week of October. With these figures, we used 183,600 gallons of pond water for irrigation this growing season.

To our delight, the pond remained at least a third full at the end of the dry season. The pond can support a larger garden or other uses such as provide a source of household water once filtered. We heard from old farmers that this was an exceptionally wet growing season. Thus, it may not be accurate to assume water use this year to be an average.

To create a less labor intensive system for next season, we recommend putting drip tape in every single row that will need watering in a given garden bed. This prevents the irrigation manager from having to spend about 30 minutes per day changing lines in beds. We used this strategy to save money on drip tape. The little money saved was not worth the work.

Throughout the season, the new manager will come to understand that the pond water is full of dissolved nutrients which the sand filter does not expel. These nutrients are a blessing for the fertility of the plants, however, they are also responsible for significant plugging up of drip slits later in the season. We noticed this problem particularly in lines that had the emitter slits pointing up towards the sun. There was an algal growth happening that was causing less water to be emitted from the holes. These plugged lines took much longer to properly water a row, since standard system pressure was no longer great enough to force water out. On these problem lines, of which there

were about five, we opened the ends of the tapes and drained them at full pressure. Quite a bit of algae and microorganism growth shot out of the hose end. This helped, although, in one case we were forced replaced the tape. We began draining all tapes in the field in this way every two months. We have since heard of soaking of the T-tape, while coiled, in vinegar to dissolve the growth, but have never known anyone who has used this method. Commercial non-organic growers in the Skagit Valley use a dilute bleach solution to alleviate this problem. However, this is not a healthy option for our biodynamic system where we are focused on soil microorganism health.

### **Systems Overview**

Though labor intensive, the systems had key redeeming qualities. We are off the grid and, thus, self-sufficient concerning water. We could operate without a well system completely, if necessary. Changing water lines so frequently took the irrigation manager down to visit all the crops up close and personal at least every other day. If the irrigation was on a computer timer, we might not have gone to these lengths, thus may not have noticed plant conditions early enough to take effective action.

## **Seed Propagation**

### **Seed Drill**

All direct seeding was done with an Earthway seed drill. For all the small plants we seeded four rows in each bed. The cost of the drill it is well worth it and on this scale of growing it is the most appropriate tool I have used. But we had a lot of sporadic plantings because of it. Getting more seed plates might help, we did not have a good selection and often had to pick plates that were not sized quite right for the seeds.

### **Hoop House**

The seeds that were not direct sown were all started in our 30'x10' hoop house. The hoop house was constructed of PVC pipes and 6 mil UV resistant clear plastic. It is a cheap design that was borrowed from Henning's hoop house and has worked very well for us. It keeps rain and wind out, and heats up quite a bit in the day. It does of course, have very little insulating value. As the sun goes down, so does the temperature in the hoop house. The propagation tables we built have a gravel top to collect heat and keep it a little longer.

We worried a bit about our tomatoes in the early spring, but in the end there was no frost damage in the hoop house. The tomatoes and peppers were germinated on a heat pad in Henning and Elizabeth's greenhouse. After a week or two, we brought the seedlings to the hoop house. Every night we carefully placed two layers of row cover on a rack over the little babies to keep them warm. The tomatoes and peppers did fine. They grew very slowly but became hardy. The other crops did great in the hoop house. We had absolutely no disease and good germination. There was a time in spring when we almost ran out of room. We filled up the three tables and had to bring in pallets to act as

tables. There was very little work space then, but it only lasted a week or two before the ground dried and the seedlings were sent out of the womb and into the great unknown. The hoop house was a wonderful place to work in during that time. Everywhere else was rainy and cold and mucky, but the hoop house was dry and warm and full of new life.

### **Potting Soil**

We mixed all our own potting soil. The recipe for the mix was not always the same due to having slightly different materials at hand. We generally followed this recipe though: 4 parts garden soil, 4 parts well done compost, 1 part peat moss, 1 part perlite, 2 handfuls lime, 2 handfuls greensand. This is for 1 full wheel barrow and is really just an estimate of what we did. The recipe works fine, but I would play around with it some to get it just right.

We used cheap plastic trays to grow everything in. Some things we grew in cells, others we grew just in the tray. Both worked alright. The trays are truly pieces of junk. They crack, bend and even melt in the sun. I hate them. Unless they are doubled up they will break no matter what, and even doubled up, they are very delicate. We have left a good supply of these trays, but when it comes time to replace them, I would look for alternatives.

## **Pest Management**

Our policy for pest management is to tend to the health of the soil. Healthy soil grows healthy plants, and healthy plants are much less susceptible to pests and disease. This does not work all the time, of course, and there were times we had to launch a defense/ attack on a particular pest. Throughout the season there were several bugs who enjoyed chewing on leaves here and there, but never did much damage. And then there were a few that went too far.

### **The Little Ones**

Wire worms did the most damage to the garden this year. There was a little in the onions, carrots, and beets, but the real damage happened in the potatoes. Almost every potato had a hole or two on it. The holes made the otherwise beautiful potatoes ugly. The good news is the holes rarely went very deep and the potatoes were still very usable. Still it was painful to dig them all up and see the consistency of damage.

The wire worms could have come in on the horse manure. Henning has had no problem with them in his garden, and we have heard the little buggers especially like horse manure. If this is true, it illustrates how important it is to create on farm fertility for vegetable production. The less we import onto the farm the better. As for what to do now, I'm not quite sure. We have not researched wire worms enough to make a plan.

We had one semi-damaging aphid infestation. It was on the fall brassicas, just as they were about eight inches tall. The interesting thing is that this crop grew faster than any planting all season long. A few days after we transplanted them, they just skyrocketed. You could almost see them grow. It was exciting until a couple weeks later when they started getting distorted leaves. There had been aphids around all season, but

nothing worth worrying about until this. I think the speed of growth left the brassicas vulnerable to attack, and the aphids that had been around took advantage of the easy food, and multiplied.

We sprayed down the crop with garlic spray, to make things uncomfortable for the aphids. We also sprayed with equisetum tea. The equisetum tea is a biodynamic concoction and is supposed to stimulate drying forces, lowering the water element back down where it belongs in the ground. With both sprays and the plants getting bigger and stronger, the aphid infestation disappeared. There was no noticeable long-term damage to the broccoli, cauliflower, or cabbage. The brussels sprouts were stunted, but still produced enough sprouts for the CSA.

### **The Big Ones**

There was a rabbit problem at one point. They would get through the fence and chew on a few vegetables. One or two even tried to burrow in and make the garden home. They didn't do much damage until we transplanted a bed of broccoli, and one night they ate about half of it. Then we decided to do something about them. We did two things: we started shooting them, and we got materials to rabbit proof the fence. The shooting worked well. I think we got about ten of them in a month's time. After that the message went out on the bunny telegram that that the CSA was not safe. We didn't have any more troubles with them. The rabbit proofing of the fence was slow work, and because we had so much work at that time of the year and the shotgun worked so well, we didn't finish installing the rabbit proofing until late fall. Now the CSA is rabbit proof. Hopefully there will be no need to shoot them unless someone is hungry for rabbit meat.

We also had a small problem with field mice eating seedlings in the spring which was dealt with effectively with mouse traps. We had some trouble in the fall with voles in the carrots and beets. They did just enough damage to be bothersome. They were not interested in the mouse traps, but Henning says vole plants work very well in keeping them out. Next spring I would plant some of those around the garden. And last but not least there are a few rats trying to make their winter home in the tool shed. They poop and chew on vegetables that are left during the night. We keep it very clean, set rat traps and hope for the best. They are the smartest little beasts, though; we haven't figured out the best way to dissuade them yet.

Deer were an issue in the fall of 2006. They would jump right through the electric fence, into the field and eat from the vegetable beds. Because they were off the ground as they sailed through the electric wires they did not complete the circuit and thus did not get shocked. Todd Goldsmith, a new farmer on Lopez and retired electric engineer and rocket scientist, told us how to rig the fence so the acrobatic mammals would get a good shock next time even if their feet were off the ground. We grounded every other wire on the fence. This way as the deer jumped through the fence and its belly touched one wire and its back touched another, one of those wires would be electrified and the other grounded. The deer would complete the circuit and get a nasty shock. We had zero problems with deer in 2007.

## **Labor**

Our farming work peaked and fell with the growing season. Traditionally the farmer rests during the dead of winter. However, this first winter was dedicated to planning and building projects which were necessary for the first year. Thus, the late fall and winter labor hours reported here will not be representative of average working hours for an incoming CSA manager. Unless developing new systems, minimal work would be necessary between December and late February.

This first late fall and winter, the CSA average weekly workload consisted of 30 hours total. During the peak of summer, the total CSA workload was 110 hours.

During the first year, the labor force consisted of both of us as well as a few volunteers. Jesse's Brother Casey and his partner Melissa helped in most of the harvests and were invaluable. Hennings summer intern was also a great help especially at harvests, she worked with us three mornings a week for the three months she was here. We expect labor hours to decrease after a new manager has worked the CSA her first year, as she learns how to be more efficient with the systems each season. For instance, between spring and fall 2007 collecting and spreading compost went from a nine-day to a two-day process after discovering helpful equipment trades in the community, more accessible compost contacts, and learning to spread compost in fall before the field became muddy.

Jesse worked on the CSA full-time and Lisa part time until the school year ended in June. Lisa's part time job allowed us to stay afloat financially while we got the business up and running. The job complemented the CSA mission and diversified our income, providing a financial safety net.

We worked mostly 6 days a week, about 8 hours a day in fall and winter, and about 12 hours a day in summer. These hours count breaks for meals into the work day. We almost always took a full day off on Sunday and believe this was necessary to keep our sanity. Usually we worked shorter hours on Saturday than the rest of the week. Included in that 6-day week was one day working on the whole farm in exchange for rent and farm-grown food.

Labor needs for the CSA were basically filled by just us two. During the summer, an S & S Homestead intern provided significant harvest help. Also, we had spotty volunteer help throughout the year, but not enough to reduce our workload significantly. We had help from a high school student who worked four hours per week throughout the season and was paid through the Family Resource Center. His presence on the farm was beneficial for all involved. We enjoyed teaching him about the farm, and he gained skills and perspective.

## **Infrastructure Overview**

Elements of CSA infrastructure predating our arrival include the water system, drainage ditches, the electric deer fence, access to the barn for crop storage, the tools contained there, and the tractor. Elements of infrastructure added since our arrival in 2006 include a 10' x 20' vegetable distribution shed with counter and attached tool shed, a 35' PVC and clear plastic seedling propagation hoop house, 3 large seeding tables, two of which have gravel surfaces for thermal mass collection, rabbit proofing for the fence, all tools necessary for managing a CSA, and accompanying computer files to be used as templates for record keeping, crop production, and marketing. Each of these infrastructure concepts are discussed in depth in the appropriate sections of this document.

## **Profitability**

During the 2007 growing season, with a 45-member CSA, net income for Lopez Community Farm CSA was approximately \$15,000. This level of profit was based on decisions made by the managers concerning size and membership price of the CSA for the 2007 growing season. Certainly, profit for a CSA/whole farm manager trainee could increase significantly if the CSA were expanded, share price and size were raised, or if members were charged for add-ons to the CSA, such as flowers and berries. Through an end-of-season evaluation, we found that most members thought the CSA share a fair value for its price. Thus, we wouldn't recommend raising the price without increasing the size of the CSA. However, increasing CSA share size and price can lead to significant increase in returns with only a small increase in workload.

Originally, we designed the CSA for 60 members for 2007. This plan would have provided an extra \$7000 income to the manager/s. Looking back on the year, we see now we could have handled a 60-member CSA. This expansion would have required more water and fertility inputs, as well as more labor on our part, but would have been very doable. If we were to stay and continue the CSA, we would seek to expand our income either through expanding the CSA to 60 members in conjunction with a renewed fertility plan to harvest more fertility from on-farm sources, or begin developing or training in other on-farm enterprises.

Though profit this year from the CSA was lower than most starting salaries, consider the fact that we did not have to pay cash for rent or 90% of our food. Our food was of superior quality than what we would have been able to afford at the store on our cash salary alone. If we estimate our housing and utilities valued at \$400/mth., low cost as it is rustic, and our food at \$400/mth, one can figure in an extra \$9600 income per year, for a total of \$24,600 in returns. Considering that most small businesses do not see a return on investments for 5 years, the profitability of this business was a huge success, as we were sold out of goods available and created a profit beyond expenses.

The CSA work during fall and winter of 2006 and early spring of 2007 was light enough that Lisa was able to work a part-time job at the school to supplement our income. While living on a somewhat frugal budget, after this first year, we were still able to come away with several thousand dollars saved. For subsequent operational years, since basic infrastructure and systems planning for the CSA are complete, it is possible that the CSA manager/s can work other jobs during the off season or develop additional farm enterprises if more income is desired.

Certainly, there is more profit to be made with the CSA and the whole farm than we took advantage of this first growing season. Considering the long term opportunity for CSA managers to become whole farm managers, there are many other parts of the farm and potential enterprises that could bring in a significant amount of income, eventually doubling possibly tripling our base CSA income for 2007.

The CSA is just the beginning for farm income potential. It provides the base for the farm manager/s to get their feet on the ground. Henning and Elizabeth's vision is that the manager/s spend their first year focusing on the CSA and then begin envisioning the

future of what they would like the whole farm to look like. Pork, goat, chicken, beef, egg, dairy, value-added products, fruit, hot house, grain, educational farm stays, are all options for entrepreneurial expansion on the farm, many of which already exist on a homestead scale. Henning and Elizabeth are committed to transitioning different systems of the farm, and the income they bring, to a new farm manager willing to take them up.

For a farmer or couple starting out, who are committed to farming in the islands, this is as perfect of an economic situation as one can find, considering it is currently almost impossible to buy land through farming today. This is an opportunity to manage and expand a farm business in a low risk environment with long term security. The owners encourage new ventures, and want to help a farmer create a profitable and balanced life on the farm. All new venture ideas are considered as long as they fall within the biodynamic paradigm. Very important to Henning and Elizabeth is that the integrated whole farm parts stay a balanced whole. So, the scale of new enterprises must be appropriate to meet these ends. The future farm project is their labor of love, since their deepest hope is that this land continues to provide food to the community.

Lopez Island is a challenging place for working people to support themselves due to high land and rent prices. The opportunity at S and S Homestead is unique because a CSA whole farm manager bypasses this hardship by accepting the offer to farm the land with long term security, and without having to buy it or pay rent. As most farmers know today, it is very difficult to save enough money on a farming income to buy a home. We believe, however, that through means in the community, the Lopez Community Land Trust, and other developing opportunities, that it would be possible for a farm manager and their family to acquire a home either adjacent to the farm or nearby,

within a few years of saving and investigating options. If we had chosen to stay on Lopez Island, after two years of living in the straw bale house on the farm, we believe we could have found a way to make housing work for us long term.

The people of Lopez Island are hungry for more local food. They are waiting to receive more options, and the local food market is expanding quickly. If you build it, they will come.