Welcome to Henry's CSA

Henry Brockman
432 Grimm Road
Congerville, IL 61729

Dear Friends:

It is fitting that I sit down to write about spring today, for the calendar tells me that today is the Spring Equinox. The calendar I refer to is not the one upon the wall, that Julian beast that manhandles the pristine 29.5-day cycle of the moon into a rigid conglomeration of 12 months of irregular lengths. No, my Spring Equinox flits with evanescent ease across the lunar calendar, alighting this year on March 20th, next year on the 21st, and back again. The Spring Equinox is a creature of the calendar that is etched upon the domed vault of the sky, its fiery timekeeper the solar disk, our Sun.

On the Spring Equinox, when the sun's path crosses the celestial equator, day and night are equal in duration—12 hours of daylight matched by 12 hours of night. For me, the Spring Equinox marks the beginning of a race, unfolding at an ever-quickening pace, toward the longest day of the year—the Summer Solstice on June 21st.

Over the three months (*month*, by the way, is from Old English "mona," meaning moon, although our months have had nothing to do with the moon ever since Julius Caesar, and later Pope Gregory, got a hold of the calendar) . . . but, as I was saying, over the three months between the Spring Equinox and Summer Solstice, the days stretch luxuriantly from 12 hours to 17 hours long. The world of plants responds to the longer days with exuberant growth. Every additional minute of sunlight equals another minute of photosynthetic zeal, during which the chloroplasts in the plants' leaves—those tiny factories—convert the sun's light energy into chemical energy. The product of photosynthesis is glucose molecules, in whose bonds that energy is stored. The glucose molecules serve as building blocks for more complex carbohydrates, such as starch, that serve as the storehouses, holding energy for later use. The energy released when glucose or any of the long-term storage molecules are broken apart through respiration is used by the plant to power growth and other metabolic processes.

Solar-Powered Plants

Plants are solar-powered beings, a mode of life called autotrophy, meaning self-nourishing. Through photosynthesis, plants harness the energy of the sun and use it to combine carbon dioxide from the air with water from the soil to form those glucose molecules. We humans, with typical heterotrophic arrogance, tend to forget that our entire existence is based on the fact that plants can feed themselves on sunshine, water, and air. We, on the other hand, need plants to feed us or to feed the other animals that

then feed us. Just like plants, we power our bodies by oxidizing glucose molecules to release their chemical energy. Unlike plants, we cannot synthesize our own glucose, so we eat plants (or plant-fed animal products) and break apart their glucose molecules through digestion, releasing their energy to power *our* growth, *our* metabolic processes.

We are not solar-powered, so we are not self-nourishing. We live off the largesse of the plant world not only for the food we eat but also for the air we breathe. (We can talk about bacteria's role some other time.) Glucose is not the only product of photosynthesis. For each molecule of glucose produced, the plant also produces six molecules of oxygen and six molecules of water. Solar-powered plants are not merely clean-burning; they actually give off the oxygen upon which the entire animal world depends. The plant world "inhales" carbon dioxide and "exhales" oxygen. We animals breathe in that oxygen and exhale…yes, carbon dioxide. This simple equation epitomizes the wisdom of the natural world: one organism's waste is another organism's life's breath.

The Race from Equinox to Solstice

We humans may not be solar-powered, but during the growing season I am definitely a solar-activated being. To keep pace with all the plants on my twelve acres of vegetable fields, I have to match my lifestyle to theirs. When the first ray of sunlight alights on a lettuce leaf, the turbines in the chloroplasts begin to turn and they don't stop until the first shadow of evening falls across the field. So I, too, allow the sun to drive my days. For the next three months, the sun will pull me gently from bed a little earlier each morning and lay me sweetly down a bit later each night until Summer Solstice, the longest day of the year, when the birds sing me awake at a quarter after four in the morning and nightfall doesn't chase me home until after nine o'clock in the evening.

As the days lengthen and the temperatures rise between the Spring Equinox and Summer Solstice, the twelve acres of land I farm will be transformed from quiet winter slumber to riotous life. The soil, now cold and wet, will warm and come alive, tickling the nostrils of all the field mammals (myself included) like the scent of bread rising.

The fields, now a canvas covered with the brilliant green of my winter cover crop of rye and hairy vetch, will turn black as I till in the cover crop to reveal the rich soil beneath. Soon the seeds from the first sowings will begin to germinate and pointillist dots and impressionist lines of pale green will appear here and there across the field. Then slowly, gradually with each passing day, the dots will become abstract expressionist blotches and patches. The lines will become ever-thicker brushstrokes,

until, once again, the black soil is hidden from the sun by verdant leaves, gracefully tilting their chloroplasts toward the sun.

My family begins these three months bending low into the root cellar for the last of last fall's potatoes and carrots, diving deep into the freezer for the last bags of frozen corn, beans and kale, and reaching on tiptoe for the last jars of canned tomatoes and applesauce. We end the three months with heaping salads of freshly-cut lettuces, spinach, radish and kohlrabi, with bowls of steamed beets and broccoli, and with stir-fries of bok choi and snow peas.

Between the spring equinox and summer solstice, we will raise in the greenhouse and transplant to the field 2,000 lettuce plants, 300 Brussels sprouts, 800 kale, 1,000 cabbage, 2,500 broccoli, 10,000 onion starts and 1,000 leek and scallions. We will also raise in the greenhouse and later transplant out 925 tomato, 550 eggplant, and 575 pepper plants.

Although today, on the Equinox, not a single seed has been planted to the fields, by the Solstice nearly every bed on the twelve acres will be full, some with seeds just poking their heads through the soil crust, some with vegetables ready to harvest, and others at every growth stage in between. If everything goes right, I will have planted or transplanted my first nine or so crops of lettuce (only six or so to go!) and harvested out the first three or four crops. All of the spinach crop, spread over five sowings, will already be harvested and eaten. I will be done with the spring sowings of radish and most cooking and salad greens, and won't start sowing the fall crops until late July or early August, depending on how hot and dry the summer is. I will have already planted all five spring carrot crops and should be just about ready to start digging the first one. Corn planting is over, but at least another month will pass before the first tender kernels burst beneath our teeth. All the plantings of winter squash, pumpkins, watermelons and muskmelons will be in, but it will be August before they begin to ripen. All in all, I will have already planted hundreds of different vegetables in tens of separate plantings.

And by the Summer Solstice, my CSA and market customers will have four weeks of my produce under their belts—literally. You will have been gorging on spinach, green onions, lettuce and arugula, kale, kohlrabi, cabbage and broccoli, radish and turnips, beets and bok choi. You will be seasoning with fresh cilantro and dill, parsley and mint, and relishing in green garlic, green onions and chives. If you're lucky, you will already have had some baby new potatoes and sugary snap peas and snow peas, and if the season has been warm, you will be beginning to snatch up the first carrots and basil, zucchini and other summer squash. Of course, you will be pining for tomatoes, eggplant, cucumbers and peppers, but it is still too early for those joys.

On summer's solstice, my family and other families will be partaking in the bounty borne of rich soil, warm sun, spring rains and hard work. And I hope, and even expect, that we will all be reveling in the wonderful tastes and aromas, colors and textures, the freshness and the healthiness of local vegetables, fresh from the field.

What I will be doing on Summer Solstice is thanking the sun for bringing me this far, thanking the plants for their self-nourishing ways by which they nourish me and all my fellow heterotrophs. I will also thank all of you who buy my produce and thereby allow me to do what I love to do: grow food in a manner that is good for me and my family, good for you who eat it and good for the very soil and environment that nurtures and nourishes it. And finally, as dusk's shadows draw down on the longest day of the year, I will sigh a little sigh of relief that tomorrow the sun will let me lie in bed a minute longer in the morning and send me to bed a minute earlier in the evening.