

Maple 4: The Tree of Hope

The smallest sprout shows there is really no death,
And if ever there was it led forward life, and does not wait at the end to arrest it,
And ceas'd the moment life appear'd.

-Whitman. *Song of Myself*

Though our house is nearly surrounded by 100-year old sugar maple trees, I planted another one in the front yard, a small but resonant gesture. Martin Luther, who began the Protestant Reformation with the small gesture of nailing a list of questions to a door, is also quoted as saying, "If I knew that tomorrow was the end of the world, I would plant a tree today!" Though the sentiment may be genuine, the quote may not be, since the earliest record of it is 1944. Of course, the model in American folklore for the impact of tree planting is John Chapman, Johnny Appleseed, who planted apple trees and left them behind as he traveled the East and Midwest. But unfortunately, the Walt Disney biography I grew up on, which told of the barefoot wanderer with the pan on his head, was not quite accurate: Chapman was a businessman who expected to make a living from the nurseries of apple seedlings he owned--over 1000 cultivated acres. Of course there is always Elzéard Boufier, *The Man Who Planted Trees* and singlehandedly reforested Provence, patiently planting trees for people he would never meet, except, of course, that Jean Giono made him up.

I planted this sugar maple tree--replacing the one that had become the stump in our front yard. It is such a human thing, "replacing" something that was at one time fifty feet tall, its trunk about two and a half feet in diameter at its base and its crown about twenty feet across, replacing

it with a stick a quarter of an inch thick and ten inches tall. That’s the power of an idea. I planted it twenty feet south of the sugar maple that reminds me of the trees in *The Wizard of Oz*, forty feet north of the vase shaped sugar maple across the driveway, two feet east of the remains of the stump, and twenty-five feet west of the dirt road that connects us with the rest of the world. I can locate its planting in space, but not clearly its planting in time--an event lost amid the shuffle of the heroic demands of daily life, the fifteen-minute increments that can digest decades. It must have been within the first two years of our moving to north central Pennsylvania over fifteen years ago.

Even before we moved there, while I worked for the railroad and knew that I would be transferred and we would relocate every three or four years, I planted trees. The first sugar maple I planted and left behind was in Bucks County, Pennsylvania. But there I was impatient and transplanted a tree rather than planted one. The tree, bought from a nursery, was about eight feet tall, its roots encased in a huge dirtball. After I spent a few days with pick axe, adz and shovel digging a pit, the flatbed truck came with two guys to drag the tree off into its final resting place. The tree lived, but it did not grow much for many years. Across the driveway from it, I planted a red maple—essentially a ten-inch twig with roots. Ten years after I planted the trees, when we were already many years in our new home in northern Pennsylvania, we drove by the house while we were visiting old friends and found that both trees were the same height. Now a red maple does grow more quickly than a sugar maple under the same conditions, but only a bit more quickly.

Later I discovered the importance of the “root-shoot relationship” to growth rate. A tree can be transplanted with surprisingly few of its roots intact and survive. But it will not grow until the root structure matches the above-ground-branching structure. Thus our big sugar maple did

not start growing until it had grown enough roots. In the mean time, the little red maple almost immediately added length and leaves, reaching out to catch more sun. Perhaps this is a lesson about a lack of patience: the suggestion that for the same money and about the same energy I might have been able to plant a small forest rather than one large tree, though the lesson could be about selfishness since I wanted a tree for me, right away. I remember meeting someone, a man in his forties, who planned to have trees—big things, 20 feet tall—installed around his house. And “installed” is the word. The cost was staggering and there was a chance that the trees would not survive, but the result was that the mature trees would be his rather than some future generation’s. But there is a good chance that the trees will never grow in his lifetime, that the real action will be below ground, invisible, as the trees try to reestablish their foundations, and he will water and fret and fertilize to produce growth he will never see anyway.

But does it make sense to approach tree planting as if it is something more than just planting a tree for myself? J. Sterling Morton of Nebraska City, Nebraska, United States Secretary of Agriculture from 1893-96, thought so when he said,

In no system of religion can a ceremonial be found that so incarnates faith as the act of tree planting. We place the roots of the infant tree in their bed of mould with serene and confident certainty that the sun and earth will nourish, warm and quicken the sapling into the forest giant. Our's [sic] is an act of devotion to nature and the Supreme law; it is faith expressed in a deed; and it is a deed which conveys health, happiness and consolation to generations not our own.

These are stirring words, but faith requires that no reason justifies the belief. As Morton gets beyond his first sentence, he implies that the faith involved in planting trees will always be

rewarded somehow, that planted trees actually grow. If it works every time, the way a rock always falls to the ground when we drop it, that’s not faith; it’s necessity.

The sugar maple I planted came as part of a package of 10 seedling trees sent to us by the Arbor Day Foundation as a reward for joining. The Arbor Day Foundation is as American as a nineteenth-century apple pie (make of that what you will), and according to the Foundation, the creator of Arbor Day is none other than the faithful J. Sterling Morton, when he was a newspaper man moving to Nebraska City, Nebraska from Detroit in the mid-nineteenth century. With the highly developed perceptions of the people of that age, he noticed that there were not many trees in Nebraska and immediately started planting them. The Nebraska prairies had been considered pretty much a waste right from the beginning: prairies were “empty” except for buffalo whose primary characteristic was that they were not cattle so it was necessary to fill the empty prairies with cattle and farms. Morton felt that filling some of the space with trees would make the place look more like Detroit. The idea of Arbor Day was embraced enthusiastically. But Nebraska is not a “tree” place. According to the University of Nebraska Cooperative Extension, after over a century of tree planting, the state has about 1.8 million acres of land in trees, or about 3.7% of the state. But wait; there’s less. One million of those acres are defined as “non-forest land with trees” which means that they are less than 16.7% forested but “contain one or more trees per acre at least five inches in diameter at breast height (4-1/2 feet high).” Of course that so many of the trees are on non-forest land may be a tribute to Morton’s efforts to interest individuals and communities in tree planting. Pennsylvania is a tree place, however. After spending most of the nineteenth century turning Pennsylvania’s forests into a smoldering wasteland, the Commonwealth now has, according to the Legislative Forestry Task Force, 17 million acres in trees, about 60% of the state’s land area.

The ten trees from the Arbor Day Foundation came in a small plastic bag, thin little sticks with bare roots. The sugar maple was the only one I paid any attention to; the others I just stuck in the ground on the edge of our mowed yard. I soaked the sugar maple seedling in water while I worked, and after stripping the grass off of an eighteen inch circle and churning the dirt up a bit, I dug a small hole. I suspended the seedling in the open space at the center of the hole, placed the roots of the infant tree in this bed of mould with serene and confident certainty, spread out the small root structure, and then pushed the dirt around the tree. I watered it and there it was—a sugar maple tree, a little longer than a pencil and a little thinner.

The Nebraska City News, reporting on J Sterling Morton’s Arbor Day Speech of April 22, 1885, quoted him as saying: “Animal nature [. . .] is engaged in a constant effort to tear down and destroy vegetable life, for it is upon the vegetable that the animal, in all its forms, founs and has its being.” It is an odd statement, but it squares with my experience: animals repeatedly destroy their food supply because they will not wait. This was certainly the case with the sugar maple that Morton’s Arbor Day Foundation sent us. It grew a bit that first season and a bit more the second, but late in the following winter I noticed that it had been chewed back to a stick with a couple of stubby branches. It had lost its apical bud, and that loss sends bad signals to the rest of the tree. According to a neighborhood legend, when the old maples were planted around our house, one of the family’s horses chewed off the tops of some of the sugar maples. That could be why the first two of the now towering trees do not have strong central leaders.

Deer, not horses, were the culprits this time and they are a big problem in our area when it comes to planting trees. They seem to be particularly fond of whatever it is that anyone who plants things is particularly fond of and they seem to prefer saplings, which makes sense in the winter time when saplings may be the only things visible above the snow. The deer are like

ghosts, ghosts that eat. In the summer they pass secretly wearing their own paths along their regular routes through the fields or using ours. I have sat on our hill on a summer evening as the color drains out of the landscape and have seen some thickening of the darkness out of the corner of my eye. After waiting patiently for movement, I was able to make out the deer and all of a sudden realized that there were many. But like the Invisible Man, in the winter they leave clear tracks and the snow becomes a map of even their random activity as they work their way from food source to food source. We are surrounded by forests and fields and for the deer we are simply something in their territory. For a few years, we did not have much trouble with them. The sugar maple was one of the early signs that we were not to be spared that scourge, and now they regularly browse our vegetable garden and shrubs.

At a garage sale we had bought some columns of fencing three feet high and eighteen inches in diameter with scalloped tops. They were old and rusty when we bought them, but they were made out of heavy gauge wire and the price was right. One went around what remained of the tree.

The fence seemed to be enough to prevent further damage, and I simply left it in place to give the tree a chance to recover. Time passed; the tree grew since the root-shoot relationship favored growth. Then one spring as the snow melted, I noticed bare wood at the base of the tree. A rodent, tunneling under the snow, had nibbled at the bark, and while it had not girdled the tree, destroying the food-carrying bark all the way around and killing the tree, the little monster had done damage; the fence was not enough to keep small creatures out. We also have plastic tubes--putty-colored coils that wrap around the tree's trunk starting at its base to protect it from rodent damage. I should have done it sooner, I know. But I had already put the tree in a cage and adding a collar made it seem like the tree was in protective custody. So I added the collar anyway, just

as I wear a hearing protector when I mow with my garden tractor despite what the neighbors must think when they roar by to their upper fields on their real tractors. The sugar maple developed a scar at its base, one that is slowly healing over, but one that will probably persist. My mother told me, as I was accumulating childhood gashes and cuts, that scars make men interesting. Perhaps the same is true of trees, giving them a history by inscribing stories in their bark

By the summer of 2003, the tree was about fifteen feet tall and an inch and a half in diameter at chest height. Branches on sugar maples are opposite, that is the buds that produce leaves and branches are opposite each other on the twig (as opposed to alternate as on the Chinese chestnuts we planted in our back yard). With its apical nipped off, the trunk of the sugar maple I planted split near the top, but one half of the vee was positioning itself to dominate, larger than the other and moving toward the vertical.

One day in the middle of June I looked out the front window and noticed that fifteen to twenty of the leaves on the sugar maple were dead. When I plucked off and examined first one and then others, I noticed that the leaf stalk where it joined with the leaf body was dark brown and withered, a bad omen. I consulted with my spouse, Madalene, and then checked on the Internet and, as usual, did not find exactly what I was looking for, but as a consolation prize, I discovered a staggering number of other diseases and infestations that affect sugar maples with poetic names like anthracnose (which sounds like a disease caught from sniffing cows), maple bladder-gall mite (this one sounds like an Australian explaining surgery), or woolly maple leaf scale (perhaps a device for weighing ice-age leaves). Since none of the diseases described on line or in my books quite fit the symptoms, I finally accepted Madalene’s suggestion to call the local Cooperative Extension Office; this was for me, of course, a sign of failure, like asking for

directions. I did call, however, and Earl, who could answer my question, was not in. The receptionist suggested I bring in some leaves for Earl to examine so I took seven or eight leaves off the tree, put them in a zip-lock bag, and labeled it with our name and phone number: the horticultural equivalent of a stool sample.

I hopped into the car and headed for the Cooperative Extension Office, which is in the basement of the county courthouse in the center of town. We lived in Wellsboro, the county seat of Tioga County Pennsylvania. Wellsboro has a population of about 3300 humans; according to the 2000 U. S. Census, the county has a population of 41,373. I like to tell people there are more cattle in Tioga County than people, but that’s not true: in 2000 there were only 38,300 head of cattle. We were thinly populated. Pennsylvania has an average of 274 people per square mile; however, the 1,134 square miles of Tioga County have only 36.5 persons per square mile. So naturally, since the 9-11 terrorist attacks, we had been at the ready for the onslaught of Middle Eastern Terrorists. When I arrived at the county court house, I discovered that now all the doors except one were locked and behind that one was a metal detector and a security guard. In order to deliver my leaves, I had to surrender my Swiss army knife.

I thought it was ironic that the first person I met inside the Coop Extension Office was an Extension Agent who, even in a community where most vehicles windows sport NRA decals, was conspicuous as a “pry it from my cold dead hand” type. I wondered what he thought about my having to disarm when I came in to see him. Perhaps his concerns do not include knives, especially not foreign ones. Without having seen the leaves, on the basis of what I had told the secretary, he had called the district forester, who had thought it was anthracnose.

“I don’t think so,” was my casual response, as if anthracnose was an intimate part of my daily life. “There aren’t any brown spots or discoloring of the veins.” I was shameless in

wielding my half-an-hour old knowledge. We agreed that he'd get them to Earl, and Earl would get back to me.

“So what are these leaves on my desk with your phone number on them?” Earl asked when he called a couple of days later. I explained. “I'll get back to you,” he said.

A few hours later the phone rang. “The culprit is an insect, a sawfly, the maple petiole borer,” Earl said. I held my breath waiting for him to tell me I needed to cut the tree down and burn it or spray it repeatedly with something that required an OSHA-approved combination respirator and neoprene gloves. “You don't need to do anything about it. The experts don't even recommend any sprays for it.” I breathed out.

He sent me a flyer that explained things in more detail. The dying leaves are all about reproduction. The sawfly punctures the leaf stem and, through a pin-prick size hole, lays an egg. The larva that hatches from the egg hollows out the inside of the stem by eating it so the larva can grow to its full size of about a third of an inch (8 mm.) in about a month. I did not think of cutting the petioles open and checking for the larvae at the time. Perhaps I will get another chance when summer comes around again since after the stem falls off, the larvae crawl out and overwinter underground as pupae. The ones in the leaves I pulled off, of course, won't do that. The tree should be fine for now.

Whitman argues that life always triumphs, but such optimism requires us to see the forest as a larger organism of which individual trees are a transient part. Planting an individual tree in the yard of a home, as part of some human design that says, “Here we need this particular tree,” introduces death into the garden by making that one tree special so that the loss of it means something. Nature is inexorable: if the conditions for life do not exist, life will not exist, and that

death will be Nature. We are all the same to the impersonal force that tosses off horror and beauty with equal indifference. And we have moved beyond Whitman’s “Song of the Ax” to the song of the rotary ax, the delimeter, the feller buncher, the chipper, and the chain saw, and now we must see the forest itself as part of a larger organism to see the triumph of life.

I faulted Morton for using “faith” to describe planting a tree, because of his sense of certainty in assuming the tree will prosper. Given that one maple tree produces thousands of seeds and few if any offspring, it is more Nature’s way that beginnings do not produce mature endings. But even properly used, faith is too strong for me. “Faith” involves confidence and leads to the habit of mind that produces expressions like “the Faith,” which of course stands for “the one true Faith.” I am more of a “hope” person: planting a tree is an act of hope, an act which combines expectation and desire—I want this stick to become a tree and I plant it because doing so creates the possibility of this tree. People don’t seem to kill each other in the name of “the one true hope.” Hope seems more personal, more compassionate.

If the tree survives, it will outlive me, and become part of the place so that in a hundred years it may be the oldest sugar maple tree left standing in the yard, perhaps the only one left in a climate too warm to support sugar maples. But none of that is certain yet. Since I planted the tree, right now my job is to care about it and hope it will survive. Given the way Nature chews up and spits out individuals, we individuals need each other. The only hope individuals have against the powerful forces of Nature that tell us that the single organism does not matter is the force of individuals banding together. It is of course, a hopeless hope, since death trumps everything for individuals. But that is the point: to care about an individual is the ultimate act of heroic defiance. That’s why, even if Luther did not say it, it makes sense to plant a tree on the day before the world ends; that is the most human time to plant a tree.