

SEED SAVING

MAKING HISTORY IN A SEEDY WAY

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Pondering the seventieth anniversary of the Biodynamic Association in North America, I came to think of historic biodynamic farms and farmers of this continent. Having spanned multiple generations, biodynamic principles now touch many aspects of our agriculture. My mind swirled around the concept of history and legacy, which are sometimes intangible when viewed through the lens of nature. The natural world spirals forward, not pausing for reflection backwards. Although the work of a vegetable farmer may be highly celebrated at farmers' markets, dinner tables, and farm conferences, our legacy is difficult to trace. After winter rains issue forth a lush explosion of spring weeds, our incredibly ordered reality of our tidy rows of carefully planted vegetables, herbs, and flowers is all but erased. A temporary paradise is what I often contemplate as I hurry from one end of our farm to the other noticing a riot of beauty as I strain to maintain focus on the task at hand. As farmers we dance with impermanence daily. Natural forces challenge our ability to create history. Sure, we may have historic barns, heritage orchards, and livestock breeds. Who ever heard of a historic vegetable planting? "Remember the onions of '93?" Not likely.

Seeds, on the other hand, ooze heritage and history with each succeeding generation that they are grown to fruit. The word "heirloom" implies history in a direct, tangible, if somewhat sentimental, way. Like all natural patterns, plants grown from seeds don't evolve in a circular fashion, producing identical carbon copies of themselves. Rather, they progress spirally onward four-dimensionally (space and time), always receptive to climate, pest pressures, selection, pollen, and other stresses. Each seed produced is a completely new miracle. The concept of uniformity as a breeding objective is a non sequitur to how nature functions. Nevertheless, the cultivated laboratory enables growers to sculpt plant genetics into their desired form through controlled breeding. Herein lies our potential for doing something historically noteworthy. Cultivation marries human intellect with the etheric nature of the plant and thereby infuses plant varieties with nostalgia and history in our memory.

Utter the words "Sugar Snap" to a gardener and witness the subtle smile and daydreaming gaze of longing develop. Consider the Plant Variety Protection Act, which is a patent on a vegetable or fruit variety. Sugar Snap was a patented variety, as its breeders wanted to ensure a monopoly on its supply for the twenty-year duration of the patent. When we discover a good combination of genetics we want to make it last, especially if it tastes good. However, growers began to see that Sugar Snap lacked in certain areas such as resistance to disease and heat. The supplier of Sugar Snap peas didn't need to adapt and evolve because everyone loved its flavor and the patent prevented other breeders from creating new breeding lines from this strain. After the patent expired, an improved strain called "Super Sugar Snap" sought to correct its predecessor's disease susceptibility but lost some of the flavor and yield in the process. The point

here is that plant breeding is inextricably linked to the changing dynamics of the natural world; yet we still try to overlay our modern materialistic constraints on the sharing of these genetics, often times at the expense of growing the best-quality food.

In some ways plant breeding has come to be akin to writing a book or a play. We thrive on notoriety and want to be patronized for our ingenuity. We coax desirable agronomic traits from the plant realm and want to be acknowledged for this effort. Perhaps we should put the plant in front of the person/company. As farmers, we do not create varieties: we can only go so far as introducing pollen sources and noticing traits. Ideally, we hope to breed "workhorse" varieties that will stand the test of time because of their flexible genetics, disease resistance, vigor, adaptability, and public domain accessibility.

Years of seed production on our farm have afforded a unique glimpse at how to weave the plant kingdom's interpretation of history with a desire to foster lasting ecological stewardship. On our farm we produce seed for commercial contract on about two acres. While we try to harvest it as it ripens, many forces thwart our efforts—birds eat seed, wind scatters it, rain dislodges it, and we simply spill a lot. Over the years our soil seed bank has become populated with the very varieties that we have cultivated, and they become weeds. Imagine that! Some species' seed tend to persist in the soil longer than others. *Brassica rapa* mustards such as mizuna and pac choi return each spring for about three or four years like old friends returning to visit. Swiss chard, beets, parsley, kale, carrots, tomatoes, melons, radish, lettuce, and endive are notable others. Parsnips resow with a vengeance and become persistent weeds. As I tend this menagerie, I see the vision issued forth by the venerable Masanobu Fukuoka in his system of Natural Farming (read his watershed work, *The One-Straw Revolution*) of a polyculture of self-seeding annuals. He instructed that these conditions could be accelerated through the use of seed balls made of clay, compost, and a mixture of seeds. We frequently harvest from these wild vegetable populations for salad mix and poultry forage. I also try to let some of them flower and set seed so they can perpetuate their volunteer tendencies.

From a permaculture perspective, annual vegetable production is viewed as holding the landscape in a phase of arrested succession, meaning that the ecosystem is not evolving past the early pioneer phase of plant succession, which would naturally progress to include perennial herbs, animals, brambles, shrubs, and trees. Our challenge as farmers and gardeners is to meld this knowledge of encouraging our systems to evolve and become more biodiverse while preserving our culturally important vegetable crops. My hope is to see the biodynamic community create history through its embrace of new methodologies to advance the development of ecological agriculture.

Don Tipping and his family have stewarded Seven Seeds Farm for the past eleven years on the north slope of Grayback Mountain in Williams, Oregon. They produce fruits, vegetables, seeds, wool, eggs, and lamb with biodynamic and organic methods.